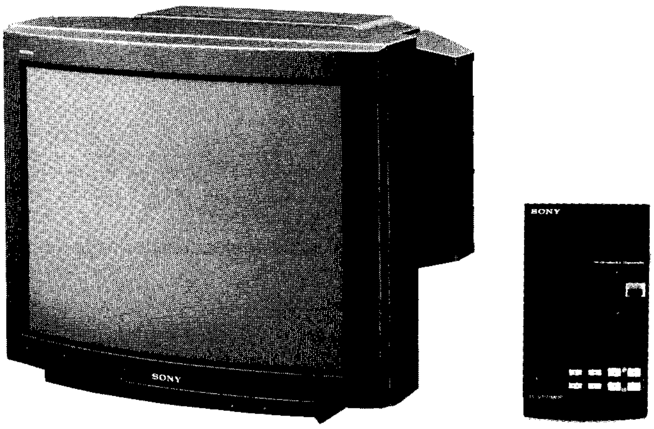
KV-D3431D
RM-811

SERVICE MANUAL

AEP Model
Chassis No. SCC-D93A-A



DE-2 CHASSIS

MODELS OF THE SAME SERIES	
KV-D3431D	

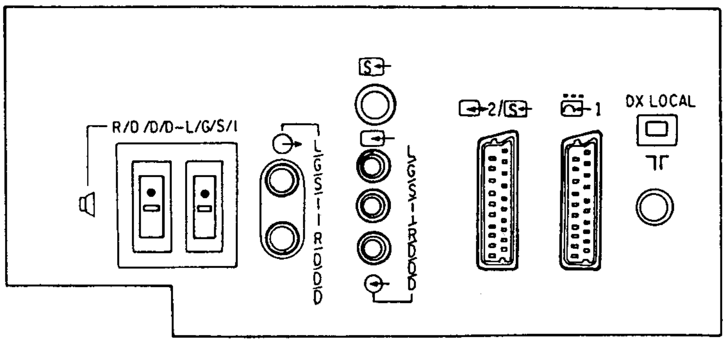
SPECIFICATIONS

Television system	B/G/H
Color system	PAL, SECAM, NTSC3.58, NTSC4.43
Stereo system	German stereo
Channel coverage	VHF : E2-E12 UHF : E21-E69 CABLE : S1-S41
Picture tube	Trinitron tube Approx. 86 cm (34 inches) (Approx. 80 cm picture measured diagonally 110°-degree deflection)
Inputs	⇄ 1 21-pin connector : CENELEC standard including RGB input. → 2 21-pin connector : including S video input → 3 Video, Audio : phono jack. 4-Pin S. video input connector Audio input jacks : phono jack
Outputs	21--pin connector : CENELEC standard Headphones jack : stereo minijack External speaker terminals : 2-pin DIN Audio output jacks : phono jack (output dependent upon TV settings)
Sound output	40 W + 40 W
Power consumption	153 Wh
Dimensions	Approx. 778x660x580 mm (w/h/d)
Weight	Approx. 73.0 kg
Supplied accessories	RM-811 Remote Commander (1) IEC designation R6 batteries (2)

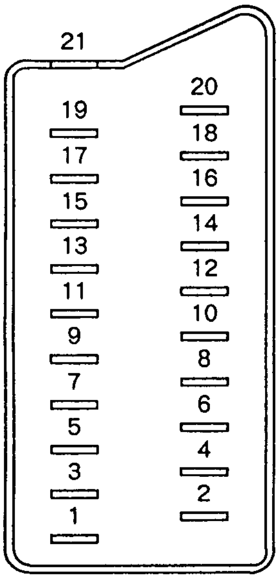
Design and specifications are subject to change without notice.

MICROFILM

TRINITRON® COLOR TV
SONY®



21 pin connector (⊖ 1, ⊖ 2)



Pin No	1	2	Signal	Signal level
1	○	○	Audio output B (right)	Standard level : 0.5Vrms Output impedance : Less than 1kohm*
2	○	○	Audio input B (right)	Standard level : 0.5Vrms Input impedance : More than 10kohms*
3	○	○	Audio output A (left)	Standard level : 0.5Vrms Output impedance : Less than 1kohm*
4	○	○	Ground (audio)	
5	○	○	Ground (blue)	
6	○	○	Audio input A (left)	Standard level : 0.5Vrms Input impedance : More than 10kohms*
7	○	●	Blue input	0.7V±3dB, 75ohms, positive
8	○	○	Function select (AV control)	High state (9.5−12 V) : Part mode Low state (0−2 V) : TV mode Input impedance : More than 10kohms Input capacitance : Less than 2 nF
9	○	○	Ground (green)	
10	○	○	Open	
11	○	●	Green	Green signal : 0.7V±3dB, 75ohms, positve
12	○	○	Open	
13	○	○	Ground (red)	
14	○	○	Ground (blanking)	
15	○	-	Red input	0.7V±3dB, 75ohms, positive
	-	○	(S signal) croma input	0.3V±3dB, 75ohms, positive
16	○	●	Blanking input (Ys signal)	High state (1−3 V) Low state (0−0.4 V) Input impedance : 75ohmes
17	○	○	Ground (video output)	
18	○	○	Ground (video input)	
19	○	○	Video output	1V±3dB, 75ohms, positive Sync : 0.3V (−3, +10dB)
20	○	-	Video input	1 V±3dB, 75ohms, positive Sync : 0.3V (−3, +10dB)
	-	○	Video input/Y (S signal)	1 V±3dB, 75ohms, positive Sync : 0.3V (−3, +10dB)
21	○	○	Common ground (plug, shield)	

○ connected ● unconnected (open) * at 20 Hz−20 kHz

4 pin connector (S)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V±3dB 75ohm, positive Sync 0.3V $^{-3}_{+10}$ dB
4	C (S signal) input	0.3V± 3dB 75ohm positive

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REMOTE COMANDER RM-811

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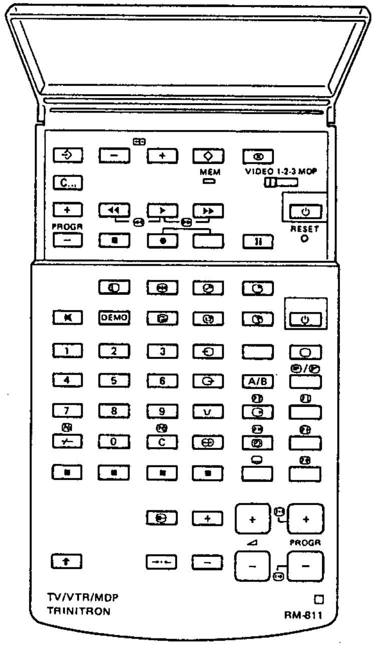
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

For a quick reading

1-1. INDEX OF THE COMMAND ELEMENTS



a) Remote control keys

Under the cover

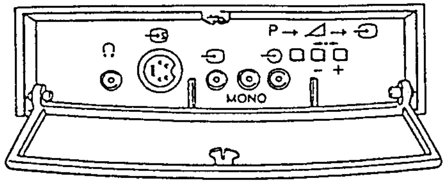
Symbol	**Function**
⟐	Program key
⊞+ / −	Programming: FF and REW search keys
◇	Programming: Memory key
⊛	Programming: TV norm, no function on this unit
C...	Programming: zero adjustment, set the search unit at the beginning of the VHF frequency band
MEM	"Intelligent" remote control: memory/function indication
VIDEO 1/2/3 MDP	"Intelligent" remote control: commutator for supplementary units
PROGR + / −	"Intelligent" remote control: program change of the video/MDP unit
◀◀, ▶, ▶▶, ■, ●, ❚❚, ⏻ keys	"Intelligent" remote control: function keys for video/MDP unit
RESET	"Intelligent" remote control: cancelling of the memorized functions

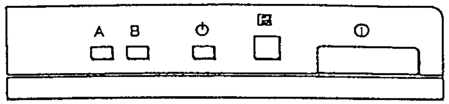
Basic functions

Symbol	**Function**
◧	Image-in-the-image: program index, switches all the non-cancelled index program places and all the data sequentially.
⬆ + ◧	Image-in-the-image: program index, switches the 4 small images memorized sequentially.
⧓	Image-in-the-image: "freezing" of the small image.
⬆ + ⧓	Image-in-the-image: stroboscopic effect at 4 different speeds.
◔	Image-in-the-image: switching of the big and the small image.
⬆ + ◔	Image-in-the-image: the respective switching of the image which follows the actual one takes place in various small images.
◕	Image-in-the-image: insertion of the image in the image. Only selectable up to 4 small images.
⬆ + ◕	Image-in-the-image: size increase of the small image.
🔇	Activation/disactivation of the sound.
DEMO	A list of image-in-the-imagefunction is represented successively (only if you have not activated the image-in-the-imagefunction).
⊜	Image-in-the-image: the small images repeats successively 4 memorized images of the main image (only if the image-in-the-image function has not been activated).
◙	Image-in-the-image: modification of the position of the small image/images.
⬆ + ◙	Image-in-the-image: modification of the colours of the frame of the small image.
◍	Image-in-the-image: disactivation of the image in the image.
⏻	Brief disactivation of the unit (standby mode)
1, 2...9, 0, -/--	Number keys, program selection and disactivation of the standby mode of the unit; for those program numbers that consist of two positions, first press the -/-- key and then the number.
⬆ + 1, 2...9, 0, -/--	Image-in-the-image: program selection of the small image.
⇥▢	Key for selecting the desired input.
⬆ + ⇥▢	Image-in-the-image: selection of the desired image in the small image.
▢	TV key: switches the unit from any operation mode to the TV mode.
▢→	Key for selecting the output signals ▢→2/⇥▢.
A/B	Bilingual transmission: for selecting the desired channel.
v	Activation/disactivation of the tone adjustment (increase of treble and bass).
⊕	Insertion keys: for inserting information on the screen.
C	For the direct selection of the channel in the TV mode without using the memory function.
⦵	Activation/disactivation of the spacial sound setting.
⊙	Hour key Activation/disactivation (only for having the televideo on the selected channel).
⬆	Works only in combination with another key.
◨+ / −	Image and sound adjustment.
→•←	Key for returning to the initial values of the image and sound settings.
⊿+ / −	Volume up/down
PROGR + / −	Program selection forward/backward

The colour keys are destined for the televideo.

b) Keys and connections of the unit

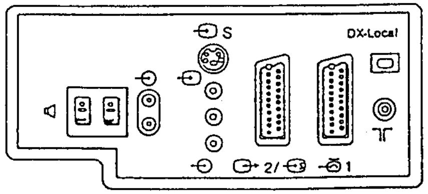




Front vision of the unit

Symbol	**Function**
∩	Earphones jack
-Ⓢ	Video S input jack
-⊖	Video input (yellow)
-⊝	Audio inputs (white and red)
P → ⊿ → -⊖	Selection key P: Program switching ⊿: Volume -⊖: Video input mode
– /+ key	Adjustment keys for the select key functions: – and + keys are pressed simultaneously: cancelling function for the image and sound adjustment.
A/B	Indications of two channels/stereo
⏻	Standby indicator
▣	Infrared remote control sensor
⏼	Power switch, activation/deactivation of the unit

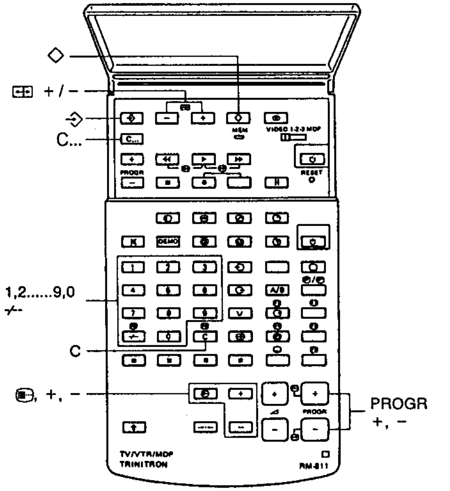
Rear vision of the unit



Symbol	**Function**
◁	Connection jacks for external loudspeakers.
⊖→	Audio outputs (cinch jacks)
-Ⓢ, -⊖, -⊝	Y/C input and video/audio input (cinch jacks)
⊖→2/-Ⓢ	21 pin EURO-AV connection (with Y/C input)
-Ⓢ1	21 pin EURO-AV connection (with RGB input)
DX/Local	Antenna attenuator
⊤	Antenna socket

Channel tuning

Use the remote control keys for tuning the channels. The remote control houses 60 programmable memory sections (00-59).



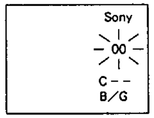
There are two ways in which to perform the adjustment:

a) Direct channel setting

The desired channel number is known and can be directly introduced.

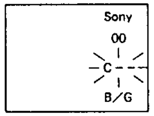
1) Turn the unit on using the power switch ⏼.

2) Press the program key -◇. The program number will flash on the on-screen display.



3) Select the desired program place using the number keys or the PROGR + / – keys. As for program numbers that consist of two positions, first press the -/-- key and then the program number.

4) Press the C key. The "C" indicator will flash on the display together with two lines to indicate the channel number. Digit the two numbers of the desired channel using the number keys (e.g. 04 for channel 4). If the desired channel is a cable channel, press the C key twice. The "S" indicator will flash on the display together with two lines to indicate the channel number. Digit the channel number according to the previous description.



5) If the channel is to be memorized, press the memory key ◇. Now, the program number no longer flashes. Is the channel is not to be memorized, repeat the sequence from item 2.

6) Repeat the operation from item 2 if you want to memorize other channels.

b) Automatic channel search

The TV set automatically searches those channels that can be received in your area (in the case of cable channels, also the respective cable channels).

1) See "Direct channel setting".

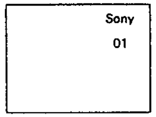
2) See "Direct channel setting".

3) See "Direct channel setting".

4) Activate the automatic search using the ⊞ + or – keys.
" + " to advance the number (higher frequencies)
" – " to decrease the number (lower frequencies)
Using the C key, the search system returns to the beginning of the VHF frequency band.

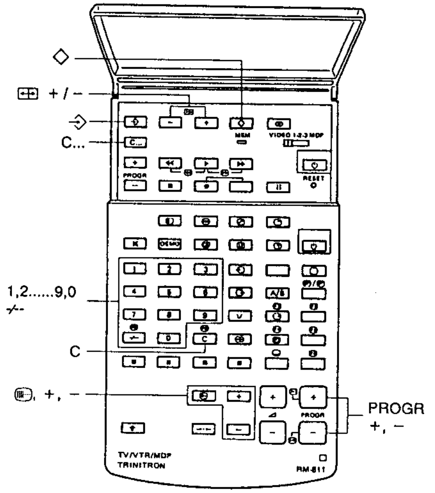
5) If you want to memorized the tuned channel, press the memory key ◇. If you do not wish to memorize the channel, repeat the memorizing operation from item 4.

6) If you want to memorize other channels, repeat the operation from item 2.



Note:
Press the -◇ key again to leave the programming mode without memorizing any channel.

1-2. SUPPLEMENTARY FUNCTIONS

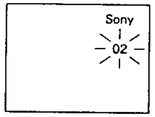


a) Individual assignation of the program name

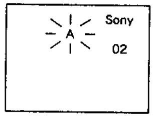
Your new Sony TV set offers you the possibility to assign individual names to the memorized programs. This name will appear in the top right corner of the screen for a short while every time that you turn the TV set on or when you change program.

1) Select the program to which you wish to assign a name, using the number keys.

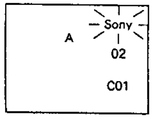
2) Press the program key ⟡.



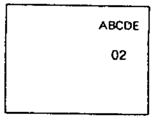
3) Press the ⊜ key.
Use the + or – key to select the first letter of the name (number or letter: 0-9, A-Z, – for empty space).



4) Press the ⊜ key again. The indication will skip to the next position, which is to be digited as the first one. In this way, you can set the five letters of the channel name.



5) Press the memory key ◇ to memorize the channel name.



b) Cancelling the undesired program positions

Thanks to the C key, your unit offers the possibility to cancel the program positions in which you have not memorized any channel during the passage with the PROGR keys.

1) Press the program key ⟡.

2) Select the program position that is to be cancelled using the number keys or the PROGR + / – keys.

3) Press the C key.

4) Press the memory key ◇ to leave the programming mode. The cancelled program positions can still be recalled using the number keys.

c) Manual fine tuning

If you have memorized a channel, the reception of which is not optimal, the automatic fine tuning might be disactivated. In this case, press the ⊞ – or + keys. If the channel is recalled again using the correct program number, the automatic fine tuning will start again.

d) Direct channel selection in the TV mode without memorizing the channels

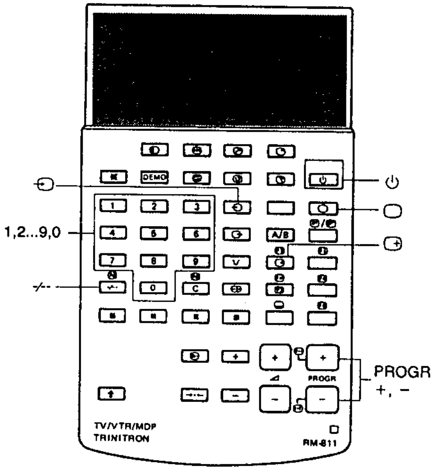
In the normal TV mode, you have the possibility of recalling other channels without memorizing them. The recalled channel will then be cancelled when you change program or when you turn the unit off.

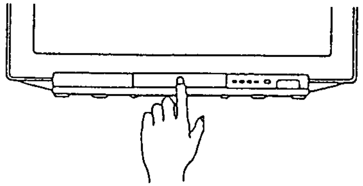
1) You are watching a TV program. If you want to select a channel directly, press the C key (for cable channels, press the key twice).

2) Digit the two figures of the channel number (e.g. 02 for channel 2).

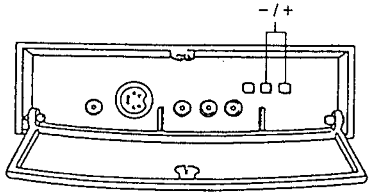
1-3. BASIC FUNCTIONS

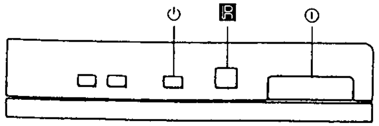
The remote control is the central control unit of your TV set, with which all the command functions are performed. The units contains a infrared sensor ▣ that receives the remote control signals. The most important functions can also be operated directly on the command section of the unit itself.





To open the cover, press the countersign with the arrow.





- **Activation and disactivation**
  Activate and disactivate the TV set pressing the power switch ⓘ on the unit.

- **Standby mode**
  If you disactivate the unit for a short while only, you can do so using the standby key ⏻ of the remote control. The unit will then stay in the standby mode and you can activate the TV set pressing any number key or the TV ▢ key. When the unit is in the standby mode, the ⏻ indicator will light on the unit.

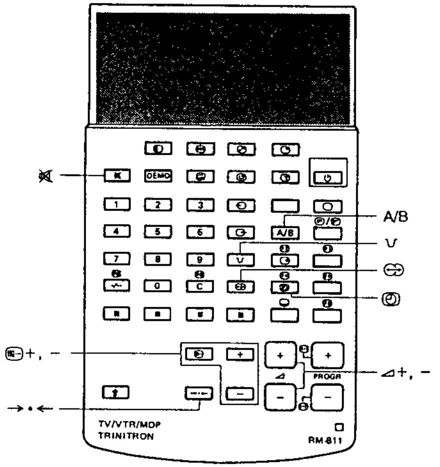
- **Program selection**
  a) Using the number keys 1, 2...9, 0.
  For selecting programs that consists of two numbers, first press the -/-- key and then the number keys.
  b) Using the program passage keys PROGR + / – .
  + : Higher program numbers
  – : Lower program numbers
  c) Using the panel of the unit itself.
  Press the program passage keys – / + .

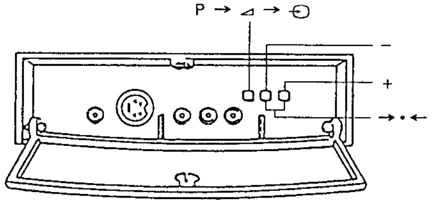
- **Informative indication on the screen**
  If you press the display key ⊡ , the various information indications will appear briefly on the screen. If you press the key again, the number and the name of the program will remain visualized on the screen until you press the key another two times.

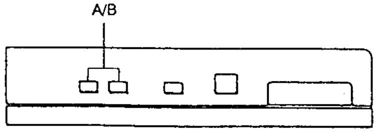
- **Switching of the signals of a connected**
  Unit press the ⊖ key on the remote control until you see the desired symbol appear on the screen:

  ⊖1, ⊖, ⊖2, ⊖2, ⊖3, ⊖3
  └── TV ──┘

  In connection with this, see "Connection of other units".







- **Modification of the image and sound adjustments**
The modifications will be visualized on a scale on the screen.

Volume
Using the + key ⊿, the sound will be recorded at a higher volume level. Using the − key ⊿, the sound will be recorded at a lower volume level.
On the unit itself:
Use the P key P → ⊿ → ⊖ to select the volume ⊿ and to memorized the desired volume level with the + / − keys.

For all the other corrections of the image and sound
Select the function that you wish to modify first with the ⊖ key: ◑ contrast, ❂ colour, ☼ brightness, ⊿ colour shade (for NTSC), 𝄢 bass, 𝄞 treble and ⊿ balance.
Thereafter, record the desired value with the + or − key.
If the normal values that have been memorized in the factory are to be cancelled, press the →•← key on the remote control and press the − and + keys on the unit simultaneously.

- **Sonic playback type**
Stereo transmissions
During the reception of stereo transmissions, the two indicators A/B will light on the unit.

Transmissions that are broadcast over two channels
For the reception of transmissions that are broadcast over two channels (when the transmission is broadcast in two languages), the desired channel can be selected using the A/B key on the remote control. In case you choose channel A (synchronisation), the A indicator will light on the unit, whereas if you choose channel B (original tone), the B indicator will light.
The individual selection of the sound can also be performed while using the earphones or the videorecorder (with the A/V jacks).

Spacial sound/tone adjustment
Use the ⊖ key on the remote control to activate and disactivate the spacial sound (⊖ or ⊖ indication on the screen).
Use the ∨ key on the remote control to activate and disactivate the tone adjustment (increase of bass and treble). (∨ or ∨ indication on the screen.)

- **Sound disactivation**
Press the 🔇 key on the remote control to disactivate the sound of the TV set and reactivate it pressing the same key again.

- **Time indication**
If televideo is broadcast on the selected channel, press the ⊙ key on the remote control to visualize the time indication on the screen. Press the same key again to cancel the time indication.

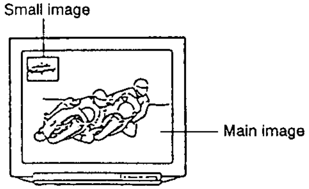
1-4. SPECIAL FUNCTION

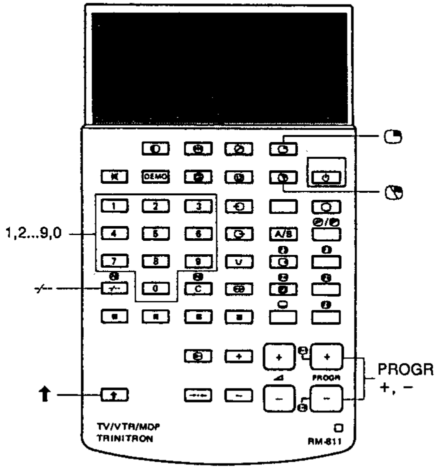
a) Image-in-the-image

With the image-in-the-image function, you have the possibility of inserting up to four small images in the image of the TV program so as to visualize other channels or video sources without switching the program.

- **Insertion and elimination of the small image**

The small image will appear in the upper left corner of the screen.
Press the ◔ key (you can choose four small images pressing the key repeatedly).
Press the ◔ key to cancel the operation.

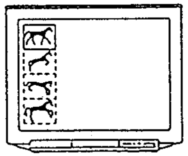




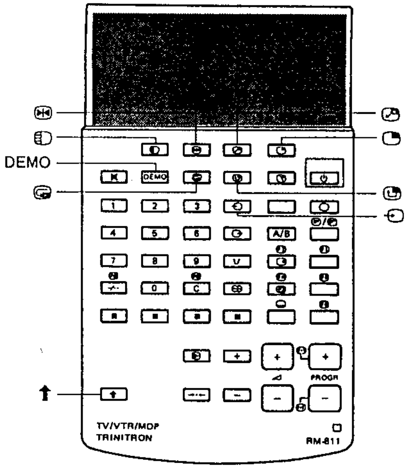
- **Program selection of the small image**

a) Insert the small image.
b) Press the ↑ key (the ↑ symbol will appear in the lower left corner of the screen). Select the desired program for the first small image using the number keys. Repeat the a) and b) operations for every other small image.
c) Select the program with the number keys or the PROGR + / − key.

- **Programming of four small images**

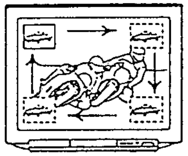


Using the ◔ key you can insert up to four small images. The programs for the small images can be recorded in the following way:
a) Press the ◔ key.
b) Press the ↑ key (the ↑ symbol will appear in the lower left corner of the screen). Select the desired program for the first small image using the number keys. Repeat steps a) and b) for the other small images.

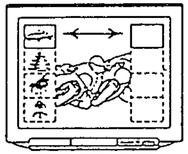


- **Modification of the position of the small image**

Select the position pressing the ◕ key. There are four possibilities for inserting a small image:

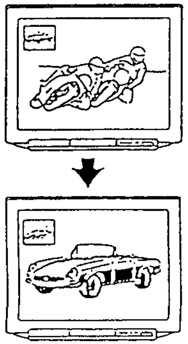


For many small images there are two positions possible.



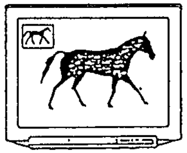
- **Substitution of the main image and of the small image**

a) Inserting the small image (◔ key).
b) Press the ⟲ key.



- **Small fixed image**
The small image is "frozen".
a) Insert the small image (◔ key).
b) Press the ⊚ key.
Press the same key again to disactivate the function.

- **Sequence of fixed images**
(only with the image-in-the-image function disactivated)



Four fixed memorized images will be repeated in the main image.
Press the ⊜ key.
Press the same key again to disactivate the function.

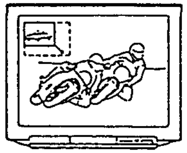
- **Program Index**
All the program positions that have not been cancelled and all the video inputs will be connected sequentially.
Press the ◫ key. Press the ⊗ key to disactivate the function.

- **Program Index of the four small memorized images**
The four memorized programs of the small image are automatically up-dated sequentially.
a) Press the ↑ key.
b) Press the ◫ key.
c) Press the ⊗ key to disactivate the function.

- **MEMO mode (only with the image-in-the-image function disactivated)**
Press the DEMO key.
Now, a selection of image-in-the-image function will appear automatically on the screen.
Press the ⊗ key to cancel the function.

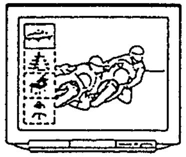
- **Increasing the size of the small image**

a) *Insert the small image.*
b) Press the ↑ key.
c) Press the ◔ key.
Repeat the operation from item b) to disactivate the function.



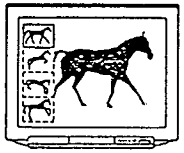
- **Updating of the small images**

To insert more small images, the updating can be performed as follows:
a) Press the ↑ key.
b) Press the ⟲ key.
Now the following small image will be updated.



- **Stroboscopic effect**

With this effect, the movements of the small image can be represented in snapshots at four different speeds.
a) Insertion of the small image.
b) Press the ↑ key.
c) Press the ⊞ key.
Repeat the b) and c) operations until the desired stroboscopic speed is recorded. Press the ⊞ key to disactivate the function.



- **Control of an AV connection of the small image**
a) Insert the small image (◔ key).
b) Press the ↑ key.
c) Press the ⊖ key.
The last AV connection used will be inserted. For the selection of another input, repeat the b) and c) operations until the desired input is indicated. Press the ⊗ key to disactivate the function.

- **Modification of the colour of the frame of the small image**
a) Insert the small image (◔ key).
b) Press the ↑ key.
c) Press the ◑ key.
Repeat points b) and c) until the desired colour appears on the frame.
(Blue-black-white-yellow-cyan-green-pink-red)

1-5. INTELLIGENT REMOTE CONTROL

Using the remote control of your Sony unit, you have the possibility of controlling up to four audio and video units with the advantage that you can operate various units using one remote control.

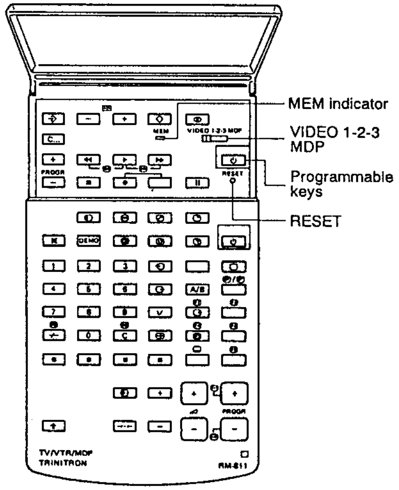
1) Usage of the Sony video tape recorders/video disc players

For the majority of the Sony video tape recorders/video disc players, you can use the remote control without programming the functions. Switch the VIDEO 1/2/3/MDP in the desired position to do so.

Video 1: Video tape recorder Sony 2 Betamax and Sony VHS FLV 202
Video 2: Video tape recorder Sony 8 mm
Video 3: Video tape recorder VHS Sony
MDP: Sony video disc player (also multiple video disc player)

After having selected the desired unit, you have the subsequent functions at your disposal:

◀◀ Fast backward
▶ Playback
▶▶ Fast forward
■ Stop
● Recording
⏻ Activation/disactivation of the unit
II Pause

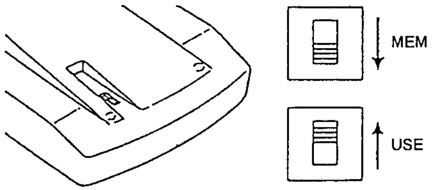


2) Controlling units of other brands

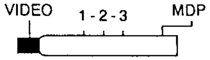
The remote control of your unit can memorize the functions of other remote controls. You can memorize one function on each of the programmable keys.

a) Switch the USE/MEM key to the MEM position (memorize).

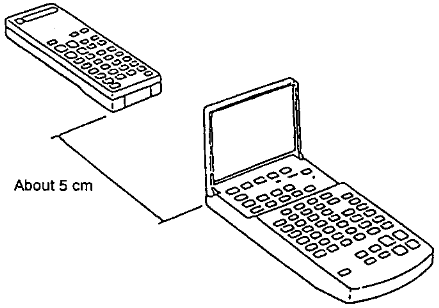
Rear vision



b) Switch the VIDEO 1/2/3/MDP switch to the desired position (independently of the type of the supplementary unit)



c) Put the remote control of the supplementary unit at a distance of about 5 cm from the remote control of the TV set. Do not move the remote controls during the programming.



d) Press the programmable key on which you wish to memorize the function and press simultaneously the key on the remote control of the supplementary unit containing the function to memorize. Press the keys until the MEM indicator turns off. If you have pressed a key, the function of which can be memorized, the MEM indication will flash eight times, after which it will turn off.

e) Repeat items 2 and 4 for each other function to memorize.

f) Switch the USE/MEM switch to the USE position (remote control).

Advice

- For products of other brands, switch the VIDEO 1/2/3/MDP to the position that is not used for the Sony units.
- For the usage of a supplementary unit, the VIDEO 1/2/3/MDP must be in the position in which it was during the memorizing.
- In order to facilitate the usage, the new functions are memorized on the relative keys on the remote control RM 811 (e.g. playback of the video tape recorder on the playback key ▶).
- You can also memorize functions of audio units.

Warnings

- If you change the batteries of the remote control, the functions will stay memorized for about 30 minutes.
- After the memorization, control the memorized function, since it might happen with units of other brands that some of the functions are not accepted.
- If the memory is full, the MEM indicator will light.

Cancellation of the memorized functions

1) Switch the USE/MEM switch to the MEM position.

2) Switch the VIDEO 1/2/3/MDP to the position of the desired unit.

3) Press the RESET key with a pointed object (e.g. a ballpoint pen). Now, all the functions are cancelled. The MEM indicator will illuminate briefly, after which it will turn off. The functions which control the supplementary Sony units will still remain memorized.

1-6. TELETEXT

Your Sony TV set has been equipped with a decoder for televideo signals. The keys have been countersigned in green on the remote control. Televideo is an information service which is furnished without any charge from the TV companies. In order to switch the televideo reception to another channel, you must first return to the TV mode and select another channel.

Recalling the televideo

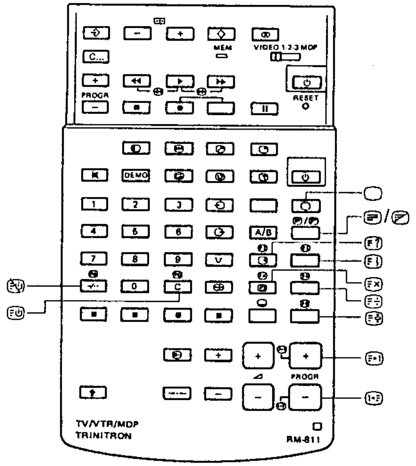
- Select the desired channel using the number keys.
- Press the ⊜/⊘ key.
  If the televideo is broadcast, the index page will be visualized on the screen. If not, the indication P100 will appear in the upper corner of the screen. Press the ⊜/⊘ again to insert the TV image in the background added to the televideo image.

Returning to the TV mode

Press the ▢ key to exit from the televideo mode and to return to the normal TV mode.

- **Selecting the pages**

Digit the three figures of the desired page using the number keys. If you were to make an erroneous sequence, complete the three figures of the number and then digit the correct number. Now, the page counter of the televideo will search the page until it is found, after which the page will be visualized on the screen.



- **Selection of nearby pages**

Nearby pages can be quickly selected with the ≡→ key (return one page) and the ←≡ key (return one page).

- **Return to the index page**

Using the ≡i key, the index page (contents index) can be recalled without digiting the figures.

- **Inserting the TV image**

During the televideo mode, there is the possibility of switching to the TV image while the system searches a selected page. In this even, press the ≡× key. Once the page has been found, the page will be visualized on the left side of the screen. Press the ⊜/⊘ key to return to the televideo mode.

Double size text

Press the ≡÷ key. Now, the upper half of the text will be doubled in size. Press the same key again to double the lower half of the text and press it a third time to return the text to its normal size.

Stopping the automatic change of the page

If a page of televideo is composed of several subpages, the change of the page can be avoided in the subsequent manner: press the ≡⊕ key. The symbol ≡⊕ will be visualized in the upper left corner of the screen. If you press the key twice, the inferior pages will be substituted again.

Recalling the subpages

A subpage can be recalled directly. Select the page with the subpages. Press the ≡◷ key. Use the number keys to select the desired subpage consisting of four figures (e.g. digit 0001). If there is a subpage present, it will be visualized on the screen.

Recalling a programmed page

(Selecting a televideo page in a particular moment)

1) Select the televideo page with a time code (not accessible for all televideo services).
2) Press the ≡◷ key.
3) Digit the four figures of the desired time using the number keys (e.g. 2030). Press the ≡× key to return to the TV program.

At the selected time, the number of the page will be visualized on the screen in the upper left corner and the page can be recalled with the ⊜/⊘ key.

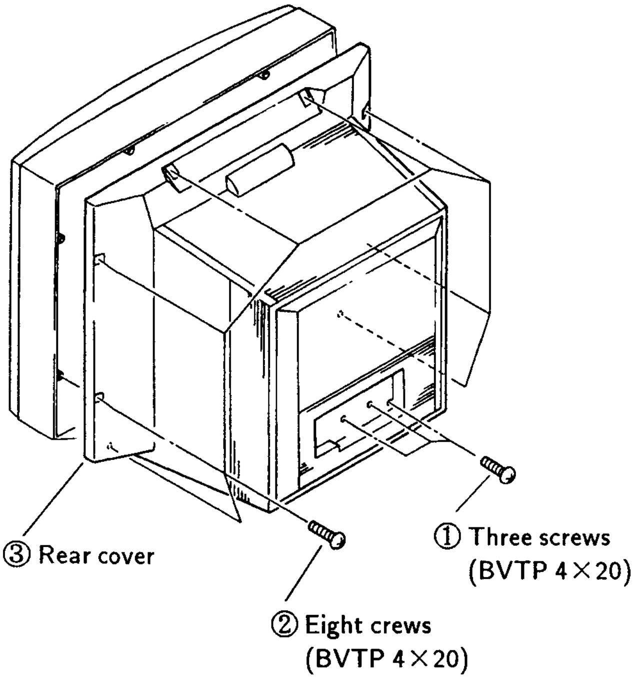
If the programmation is to be cancelled, recall the page again and press the ≡◷ key.

Visualizing hidden information (e.g. for quiz games)

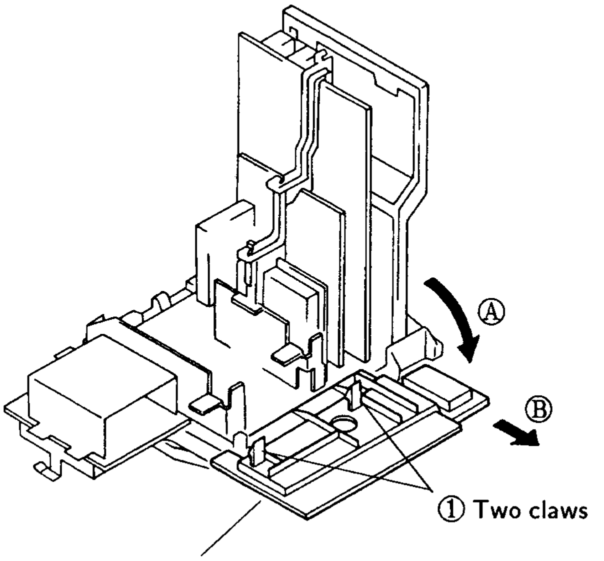
Press the ≡? key. Press the key again, to cancel the hidden information.

SECTION 2
DISASSEMBLY

2-1. REAR COVER REMOVAL

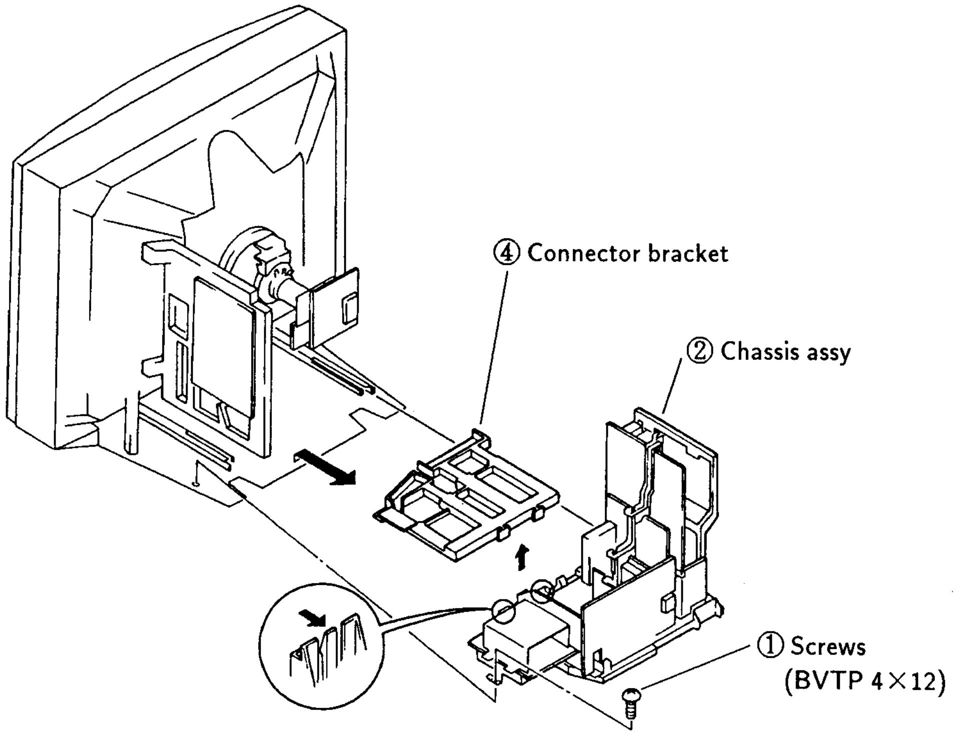

③ Rear cover
① Three screws
(BVTP 4×20)
② Eight crews
(BVTP 4×20)

2-2. J BOARD REMOVAL



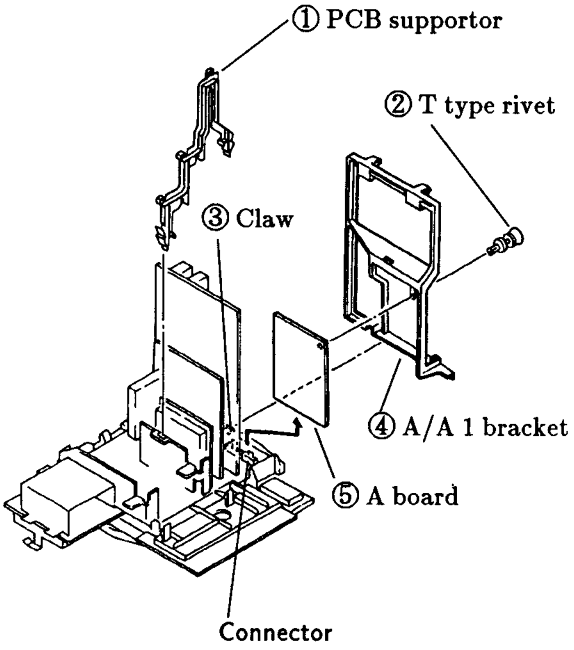
② Open J board in the direction of arrow Ⓐ.
Remove the arrow Ⓑ direction.

2-3. CHASSIS ASSY REMOVAL

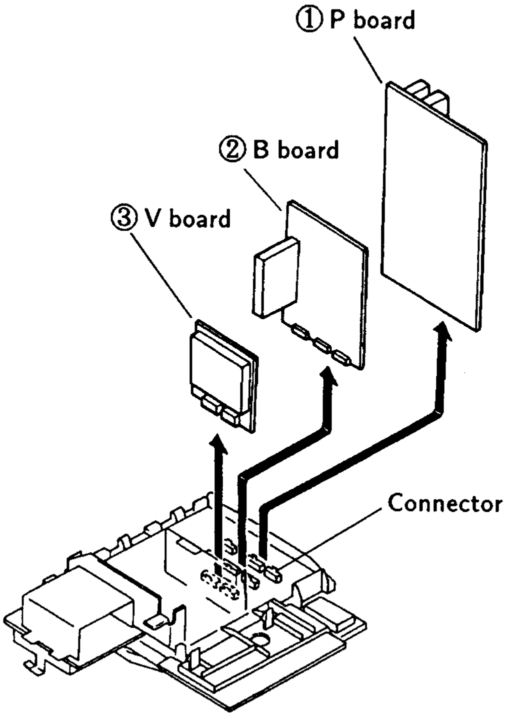

④ Connector bracket
② Chassis assy
① Screws
(BVTP 4×12)

③ Push two claws of the chassis assy in the direction of arrow and remove the connector bracket.

2-4. A BOARD REMOVAL

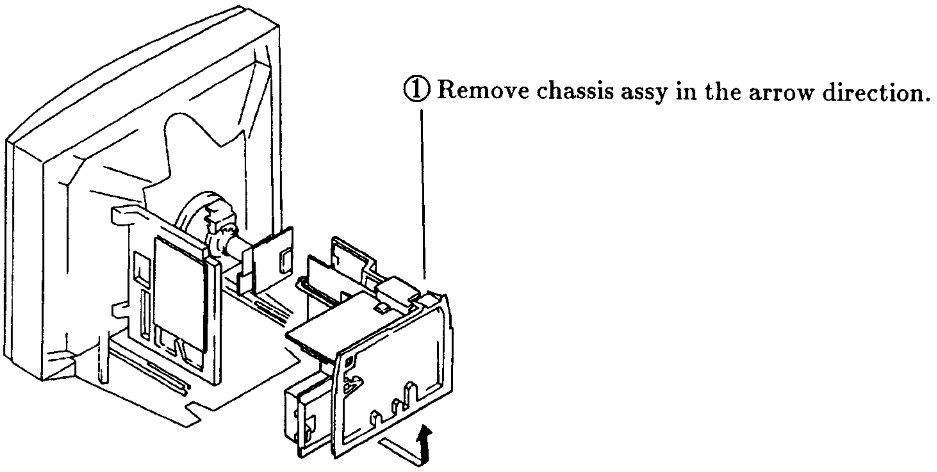

① PCB supportor
② T type rivet
③ Claw
④ A/A 1 bracket
⑤ A board
Connector

2-5. P,B AND V BOARDS REMOVAL

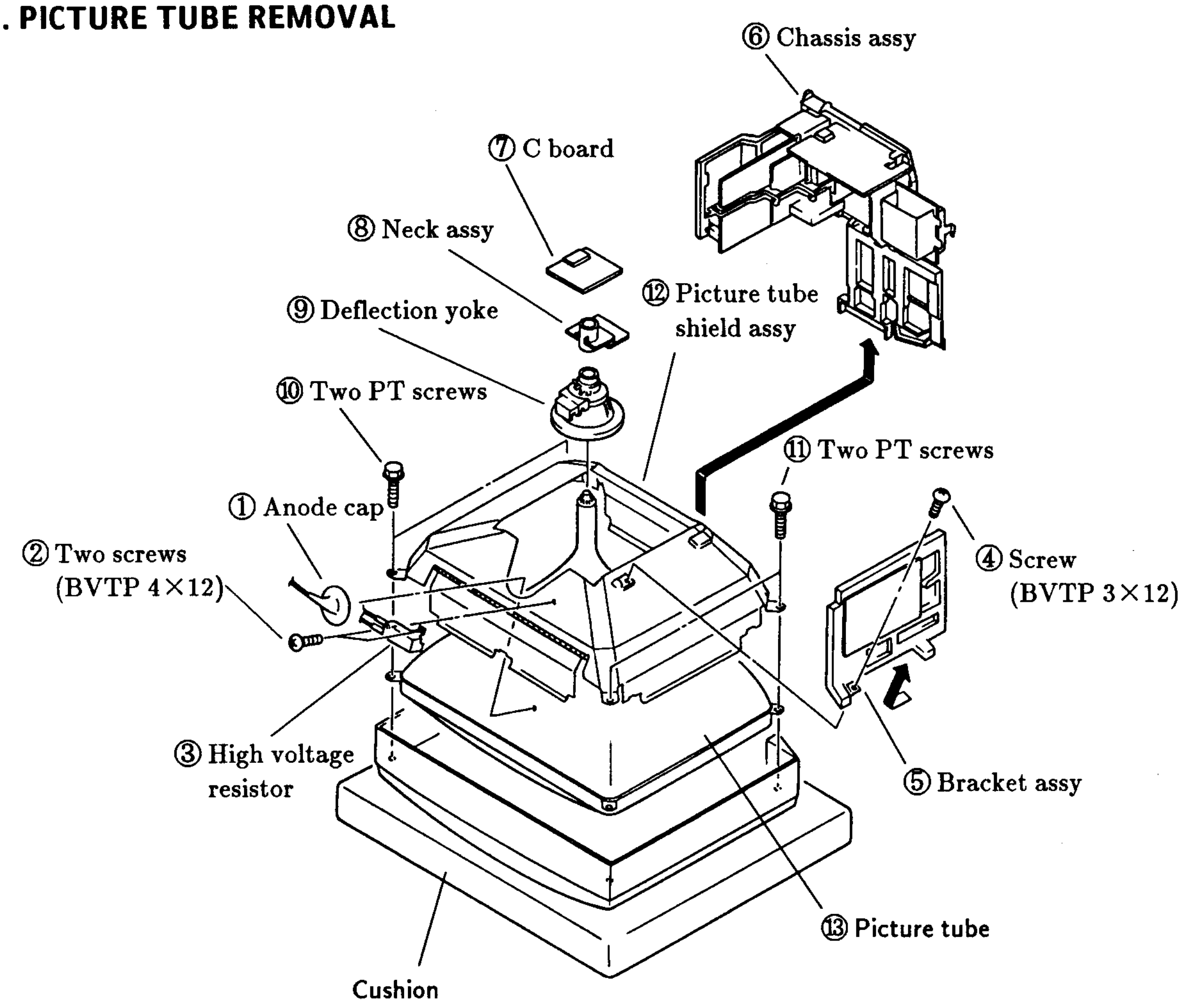

① P board
② B board
③ V board
Connector

2-6. SERVICE POSITION

* Remove the connector bracket and then perform the following servicing.
(refer to 2-2. CHASSIS ASSY REMOVAL)

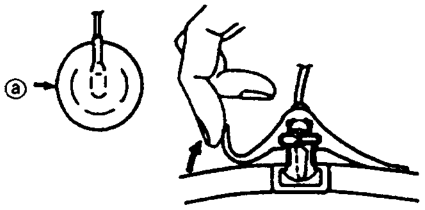

① Remove chassis assy in the arrow direction.

2-7. PICTURE TUBE REMOVAL

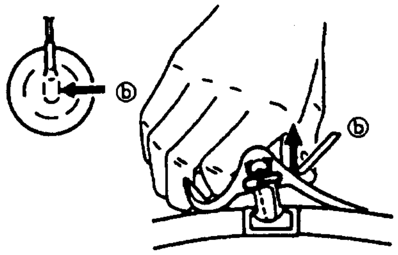

⑥ Chassis assy
⑦ C board
⑧ Neck assy
⑨ Deflection yoke
⑫ Picture tube shield assy
⑩ Two PT screws
⑪ Two PT screws
① Anode cap
② Two screws (BVTP 4×12)
④ Screw (BVTP 3×12)
③ High voltage resistor
⑤ Bracket assy
⑬ Picture tube
Cushion

• REMOVAL OF ANODE-CAP

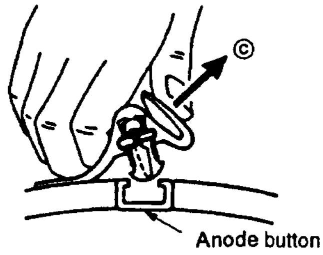
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.


ⓒ
Anode button

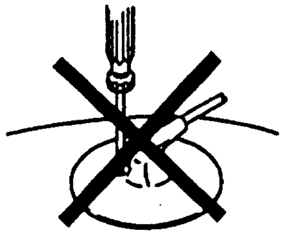
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

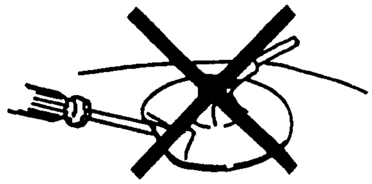
• HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with sharp shaped material!

② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.

③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there is specific instruction to the contrary, carry out these adjustments with the rated power supply.
- Unless there is specific instruction to the contrary, set the controls and switches this way :

◐ Contrast ………80%
(or remote control normal)
☼ Brightness ………50%

- Carry out the following adjustments in this order:
  1. Beam landing
  2. Convergence
  3. Focus
  4. White balance

Note : Testing equipment required
1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
   Contrast } normal
   Bightness }
2. Position neck ass'y as shown in Fig 3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.
   (See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that entire screen is red. (See Figure 3-1.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
   (See Figure 3-4.)

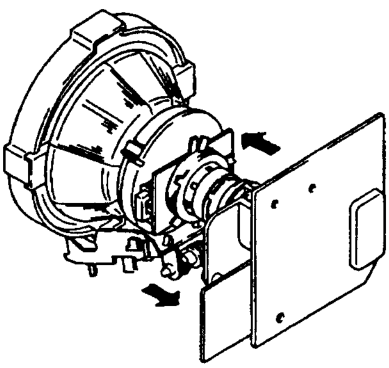
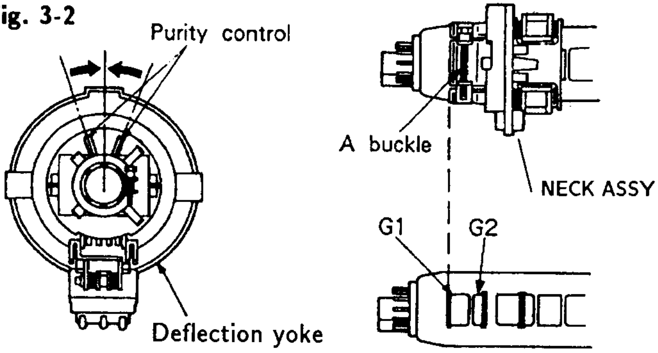


Fig. 3-1

Fig. 3-2


Purity control
A buckle
NECK ASSY
G1
G2
Deflection yoke

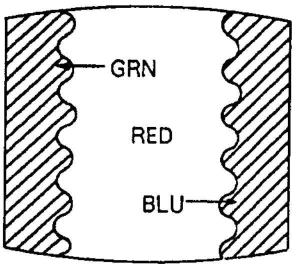


Fig. 3-3

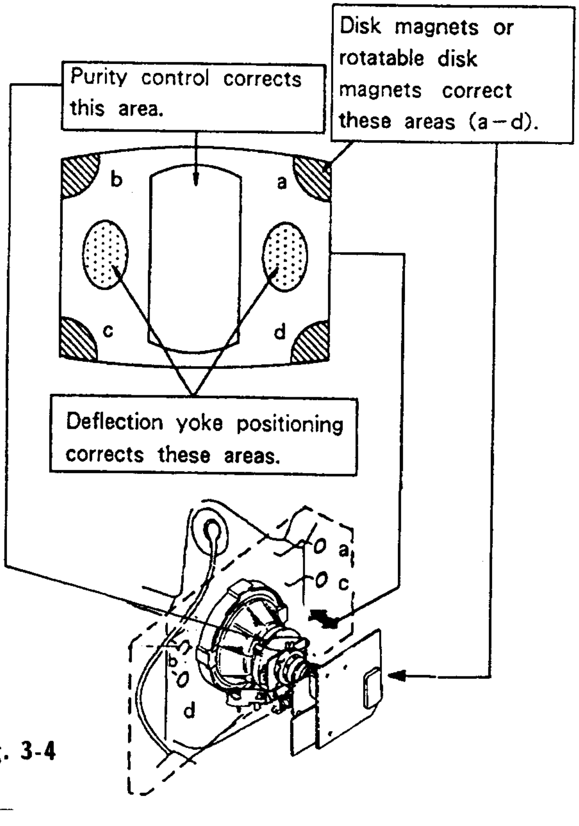

Disk magnets or rotatable disk magnets correct these areas (a−d).
Purity control corrects this area.
b
a
c
d
Deflection yoke positioning corrects these areas.
a
c
b
d

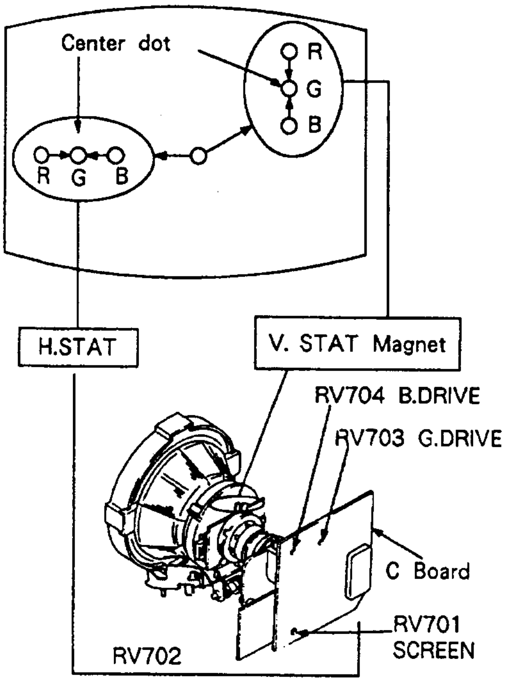
Fig. 3-4

3-2. CONVERGENCE

Preparations :

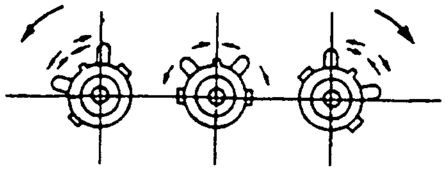
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

(1) Horizontal and vertical static convergence

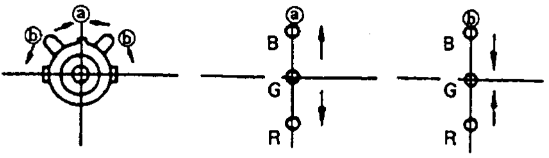


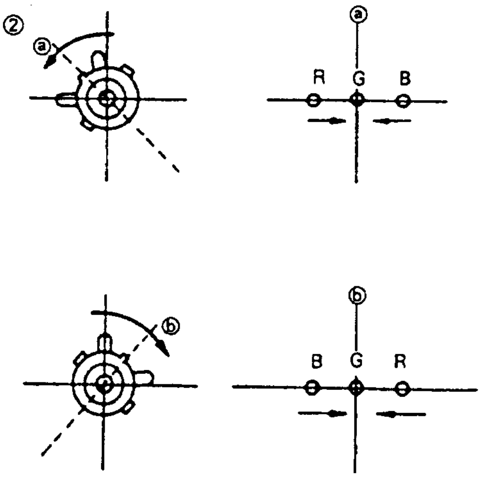
1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

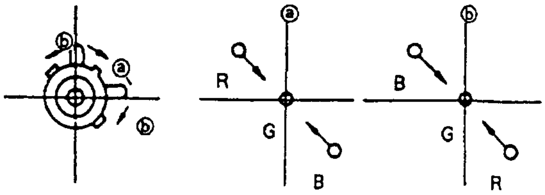
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



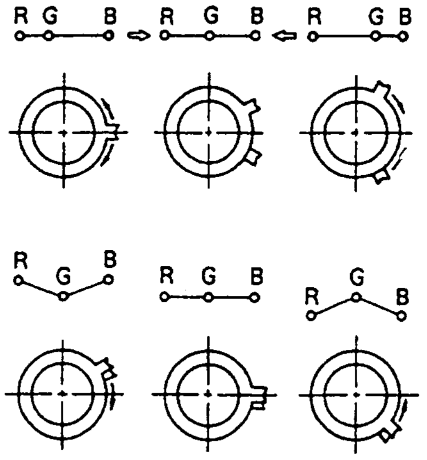
4. If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green, and blue points move as shown below.

①


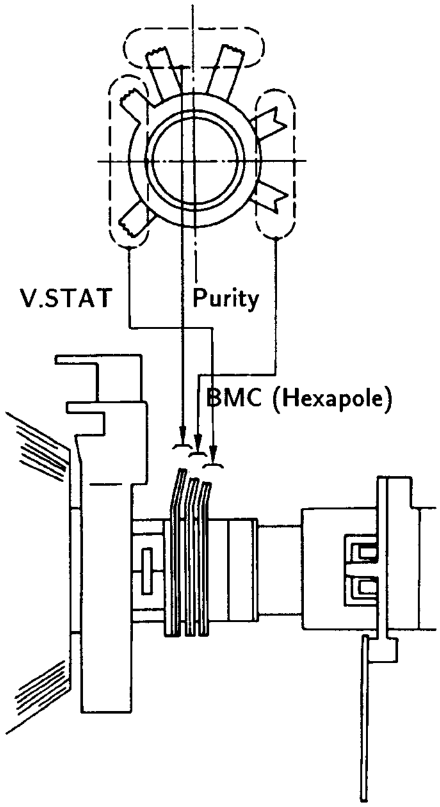
②


③


- Operation of BMC (Hexapole) Magnet



- The respective dot positions resulting from moving of each magnet interact so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction)



(2) Dynamic Convergence Adjustment

1. Adjust the Y.CROSS (RV1705) and Y.BOW (RV1702), so that RED and BLUE shown in Fig. 3-6 will bccomc a=b=c.

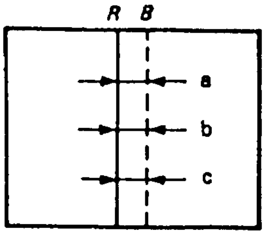


Fig. 3-6

2. Match the horizontal convergence at the center of the screen with H STAT VR.
3 Adjust the CORNER BOW (RV1703), so that RED and BLUE shown in Fig. 3-7 will become a=b=c and d=e=f.
   Note : At this point, if the proper relationship between a=c or d=f is not established, adjust the Y.CROSS (RV1705) again.

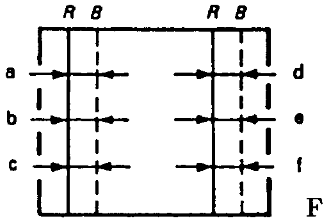


Fig. 3-7

4. Match the horizontal convergence at the center of the screen with the H STAT VR.
5. Adjust the H TILT (RV1701) so that the RED and BLUE shown in Fig. 3-8 will become a=b..

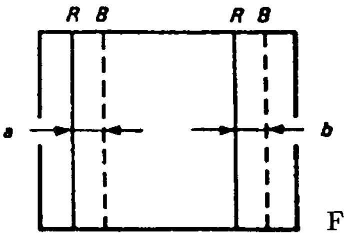


Fig. 3-8

6. Adjust the H AMP (RV1704) so that the RED and BLUE shown in Fig. 3-9 will become b=c

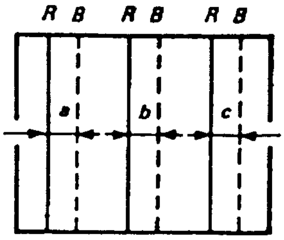
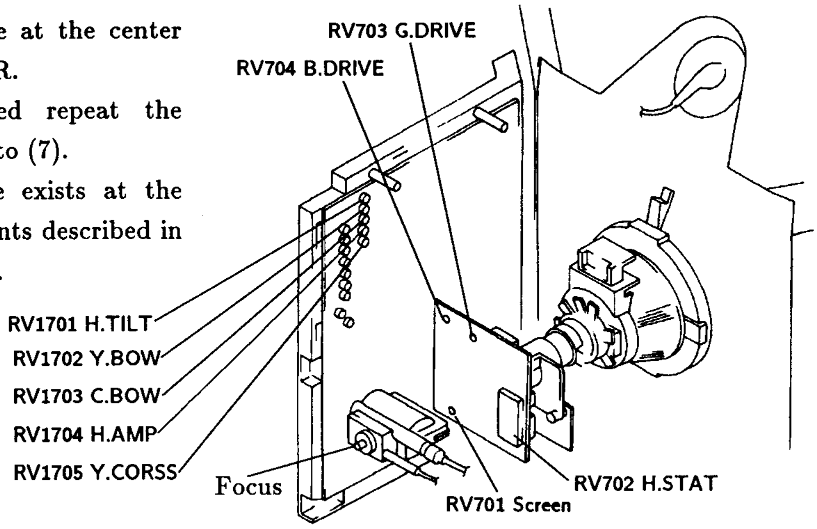
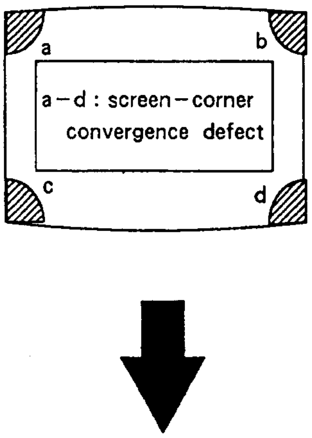


Fig. 3-9

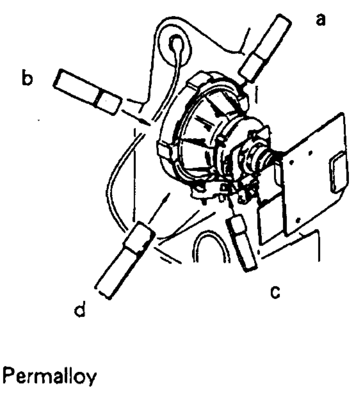
7. Match the horizontal convergence at the center of the screen with the H STAT VR.
8. When the H AMP is adjusted repeat the procedures described in Steps (5) to (7).
9. If divergence of the convergence exists at the corner of the screen, the adjustments described in Steps after (3) should be repeated.


RV703 G.DRIVE
RV704 B.DRIVE
RV1701 H.TILT
RV1702 Y.BOW
RV1703 C.BOW
RV1704 H.AMP
RV1705 Y.CORSS
Focus
RV701 Screen
RV702 H.STAT

(3) Screen corner convergence


a
b
a – d : screen – corner convergence defect
c
d

Install the permalloy assembly for the section with faulty.


a
b
c
d
Permalloy

3-3. FOCUS

Adjust the focus to optimize the screen.

3-4. WHITE BALANCE

Screen G2 setting

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its minimum level.
3. Apply 180VDC to the R, G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

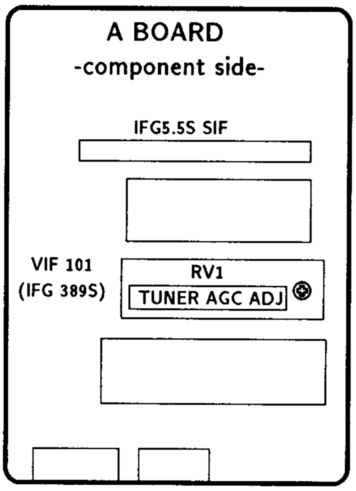
White balance adjustment

1. Input an all-white signal from the pattern generator.
2. Set the picture brightness and color controls to their normal levels.
3. Use the RV704 (B Drive) and RV703 (G Drive) to adjust white balance.

In the adjustments below, have the picture color and brightness settings at their normal levels unless there is a specific instruction to the contrary.

SECTION 4
CIRCUIT ADJUSTMENTS

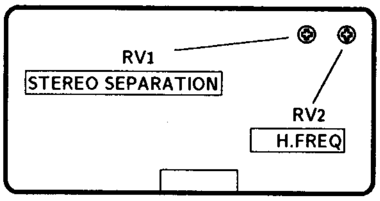
4-1. A BOARD ADJUSTMENT


A BOARD
-component side-
IFG5.5S SIF
VIF 101
(IFG 389S)
RV1
TUNER AGC ADJ

TUNER AGC ADJUSTMENT (IFG 389S)

1. Tune in an off-air signal.
2. Adjust AGC VR (IFG389S) so that snow noise and cross modulation just disappear from the picture.

IFG5.5S SIF


RV1
STEREO SEPARATION
RV2
H.FREQ

IFG5.5S SIF -component side-

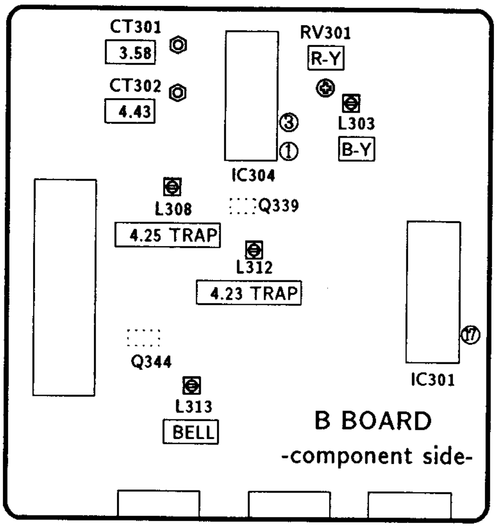
STEREO SEPALATION ADJUSTMENT (RV1)

1. Input stereo signals. (L-CH 400Hz, R-CH 1KHz)
2. Check the stereo indicator.
3. Connect on oscilloscope to pin⑧ (CH1) of CN1 through band pass filter of 1KHz
4. Adjust RV1 so that 1KHz voltage goes down to the minmum.

H FREQ (RV2)

1. Input a PAL COLOR BAR signal, then connect a jumper between pin⑫ IC4 and GND.
2. Connect a frequency counter to pin④ IFG5.5S (HP) of CN1 through a probe of 10 : 1.
3. Adjust RV2 (H.FREQ) 15.625±50Hz.
4. After adjustment, remove the jamper.

4-2. B BOARD ADJUSTMENTS


CT301
3.58
CT302
4.43
RV301
R-Y
L303
B-Y
③
①
IC304
L308
Q339
4.25 TRAP
L312
4.23 TRAP
⑰
Q344
IC301
L313
BELL
B BOARD
-component side-

REF OSC NTSC 3.58 MHz Adjustment (CT301)

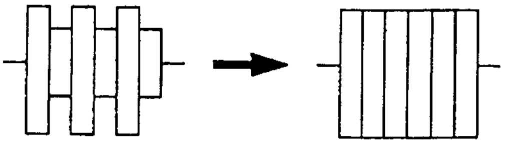
1. Input an NTSC 3.58 MHz COLOR BAR pattern.
2. Short circuit between pin ⑰ of IC301 and ground.
3. Adjust CT301 to get the slowest picture movement.
4. Remove the jumper wire from IC301.

REF OSC Adjustment NTSC 4.43 MHz Adjustment (CT302)

1. Input an NTSC 4.43 MHz COLOR BAR pattern.
2. Short circuit between pin ⑰ of IC301 and ground.
3. Adjust CT302 to get the slowest picture movement.
4. Remove the jumper wire from IC301.

BELL FILTER ADJUSTMENT (L313)

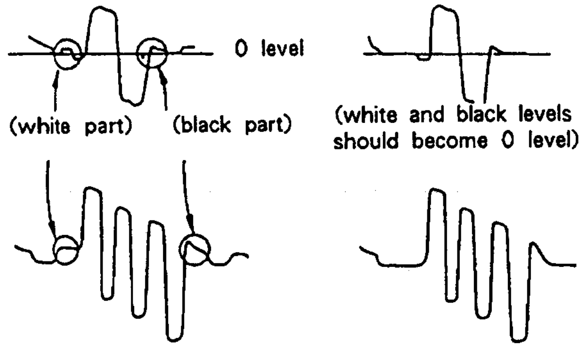
1. Input a SECAM color bar signal.
2. Connect the oscilloscope to the emitter of Q344.
3. Adjust L313 so that the waveform is flat.



<Before Adjustment> <After Adjustment>

DISCRIMINATION ADJUSTMENT (RV301 and L303)

1. Input a SECAM color bar signal.
2. Connect the oscilloscope to pin ① of IC304.
3. Adjust RV301 until the white and black sections of the waveform at pin ① are at the 0 level. Connect the oscilloscope to pin ③ of IC304.
4. Adjust L303 until the white and black sections of
5. the waveform at pin ③ are at the 0 level.


0 level
(white part)
(black part)
(white and black levels should become 0 level)

(Before Adjustment) (After adjustment)

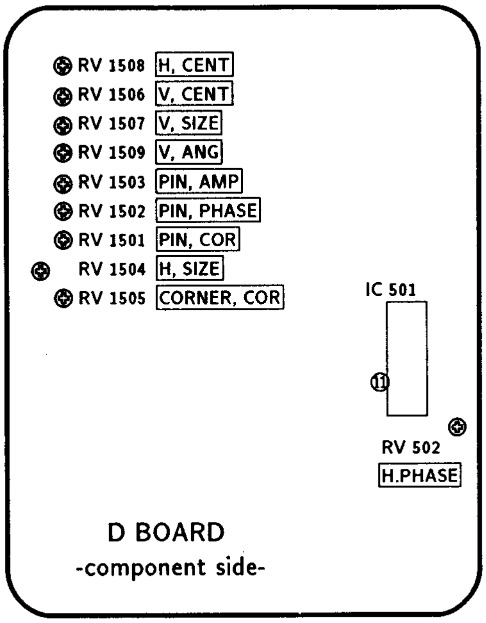
4.25 TRAP Adjustment (L308)

1. Input SECAM COLOR BAR pattern.
2. Connect an oscilloscope to the Q339 emitter.
3. Adjust L308 so that the 4.25 MHz waveform is minimum.

4.23 TRAP ADJUSTMENT(L312)

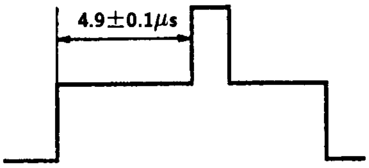
1. Input SECAM COLOR BAR pattern.
2. Connect an oscilloscope to the Q339 emitter.
3. Adjust L312 so that the 4.43 MHz waveform is minimum.

4-3. D BOARD ADJUSTMENTS

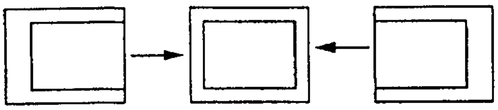

RV 1508 H. CENT
RV 1506 V. CENT
RV 1507 V. SIZE
RV 1509 V. ANG
RV 1503 PIN. AMP
RV 1502 PIN. PHASE
RV 1501 PIN. COR
RV 1504 H. SIZE
RV 1505 CORNER. COR
IC 501
⑪
RV 502
H.PHASE
D BOARD
-component side-

H.PHASE ADJUSTMENT (RV502)

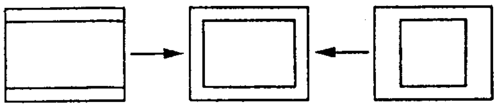
1. Input a PAL color bar signal.
2. Set the picture and brightness controls to their normal levels.
3. Set RV1508 (H.CENT) to its mechanical center.
4. Connect the oscilloscope to pin ⑪ (SCP) of IC 501.
5. Rotate RV502 to adjust to $4.9 \pm 0.1\mu s$.



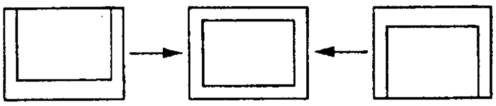
RV1508
H. CENT (HORIZONTAL CENTER)



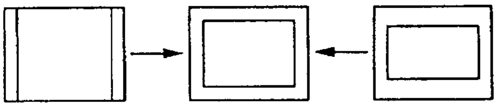
RV1504
H. SIZE (HORIZONTAL SIZE)



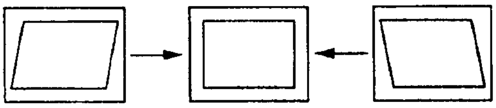
RV1506
V. CENT (VERTICAL CENTER)



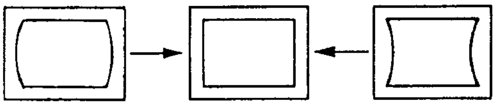
RV1507
V. SIZE (VERTICAL SIZE)



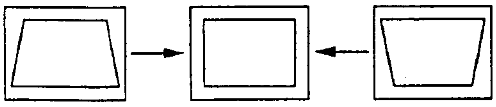
RV1509
V. ANGLE (VERTICAL ANGLE)



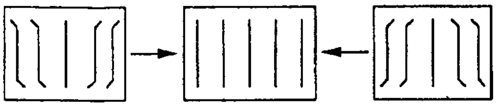
RV1503
PIN AMP (PINCUSHION AMPLIFIER)



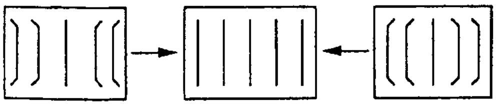
RV1502
PIN PHASE (PINCUSHION PHASE)



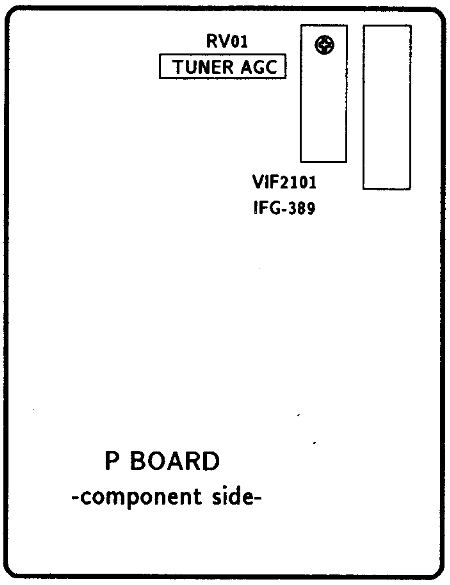
RV1501
PIN. COR (PINCUSHION CORRECT)



RV1505
CORNER. COR (CORNER CORRECT)



4-4. P BOARD ADJUSTMENTS

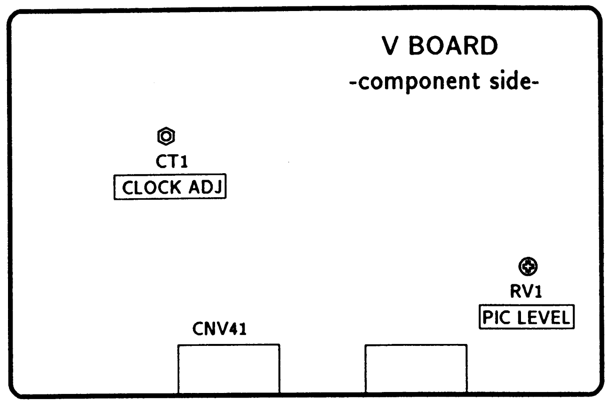

RV01
TUNER AGC
VIF2101
IFG-389
P BOARD
-component side-

TUNER AGC ADJUSTMENT (RV01)

1. Tune in an off-arr signal.
2. Adjust AGC RV01 so that snow noise and cross-modulation just disappear from the picture.

5-1.

4-5. V BOARD ADJUSTMENTS


V BOARD
-component side-
CT1
CLOCK ADJ
RV1
PIC LEVEL
CNV41

CLOCK ADJUSTMENT (CT1)

1. Remove the CNV41 connector pin ③ .
2. Put the system into text mode.
3. Adjust CT1 so that the picture does not move.

PIC LEVEL ADJUSTMENT (RV1)

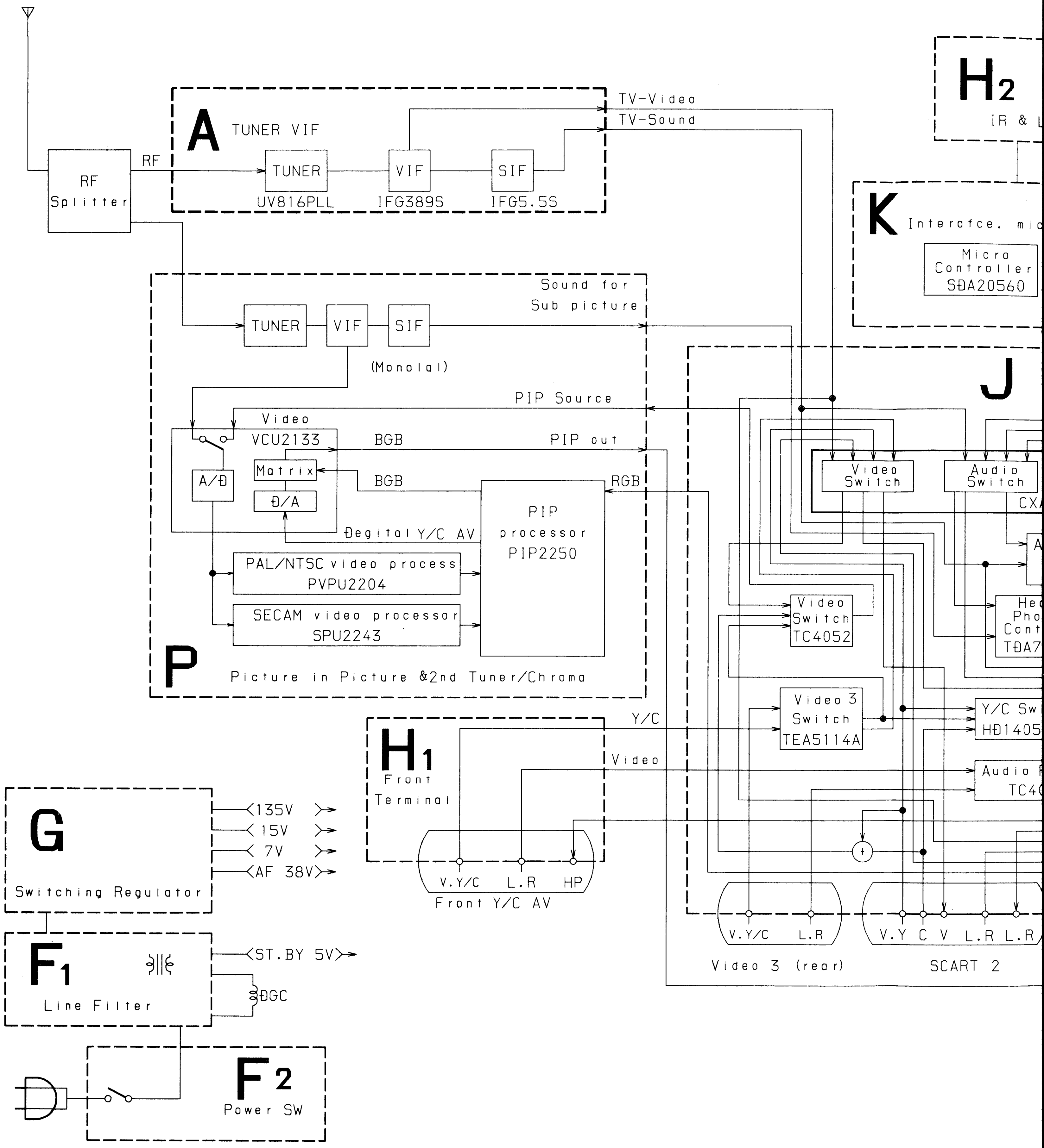
1. Maximize the picture setting.
2. Adjust RV1 so that the RGB output is 0.75V.

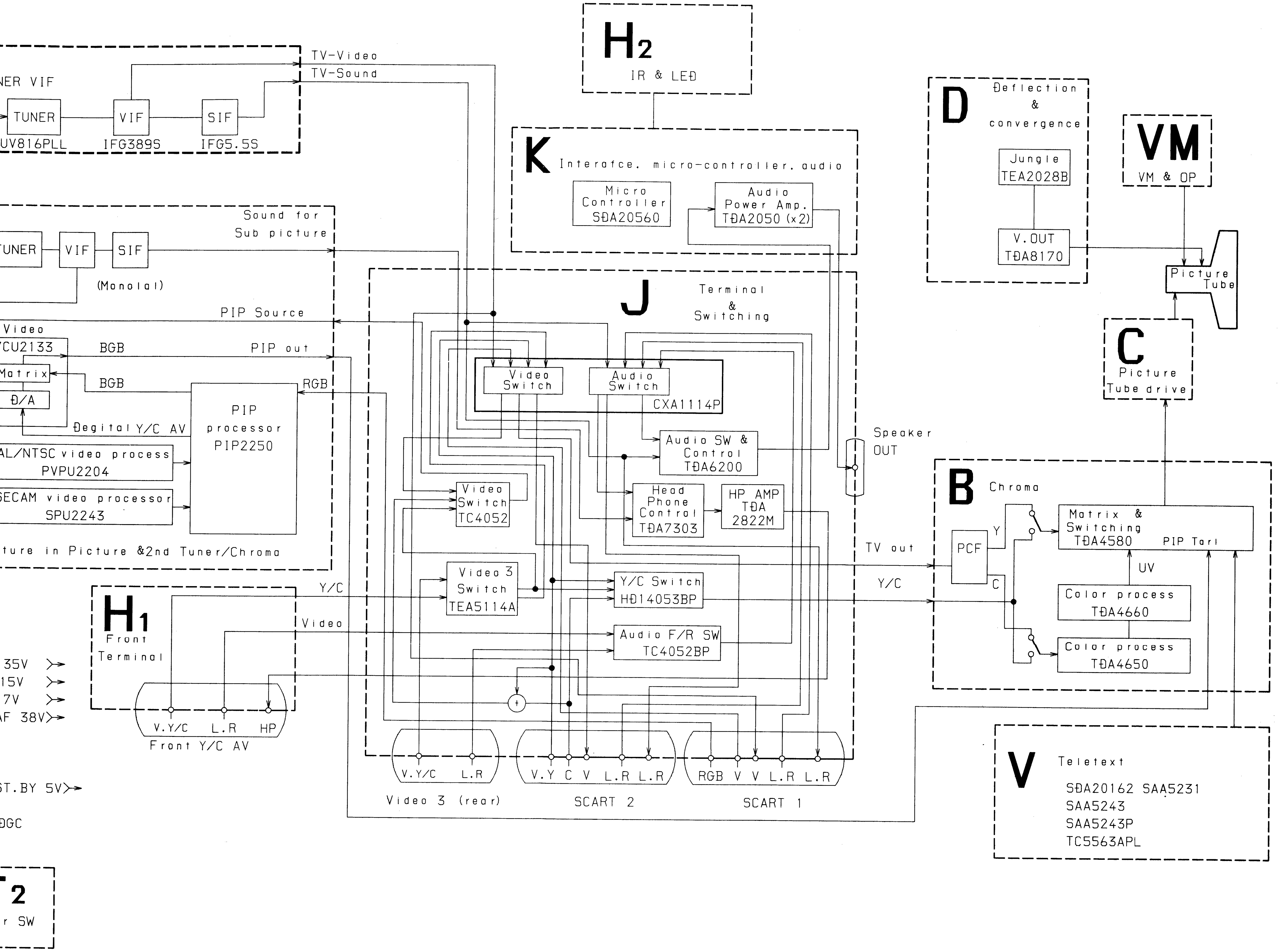
MEMO

MEMO

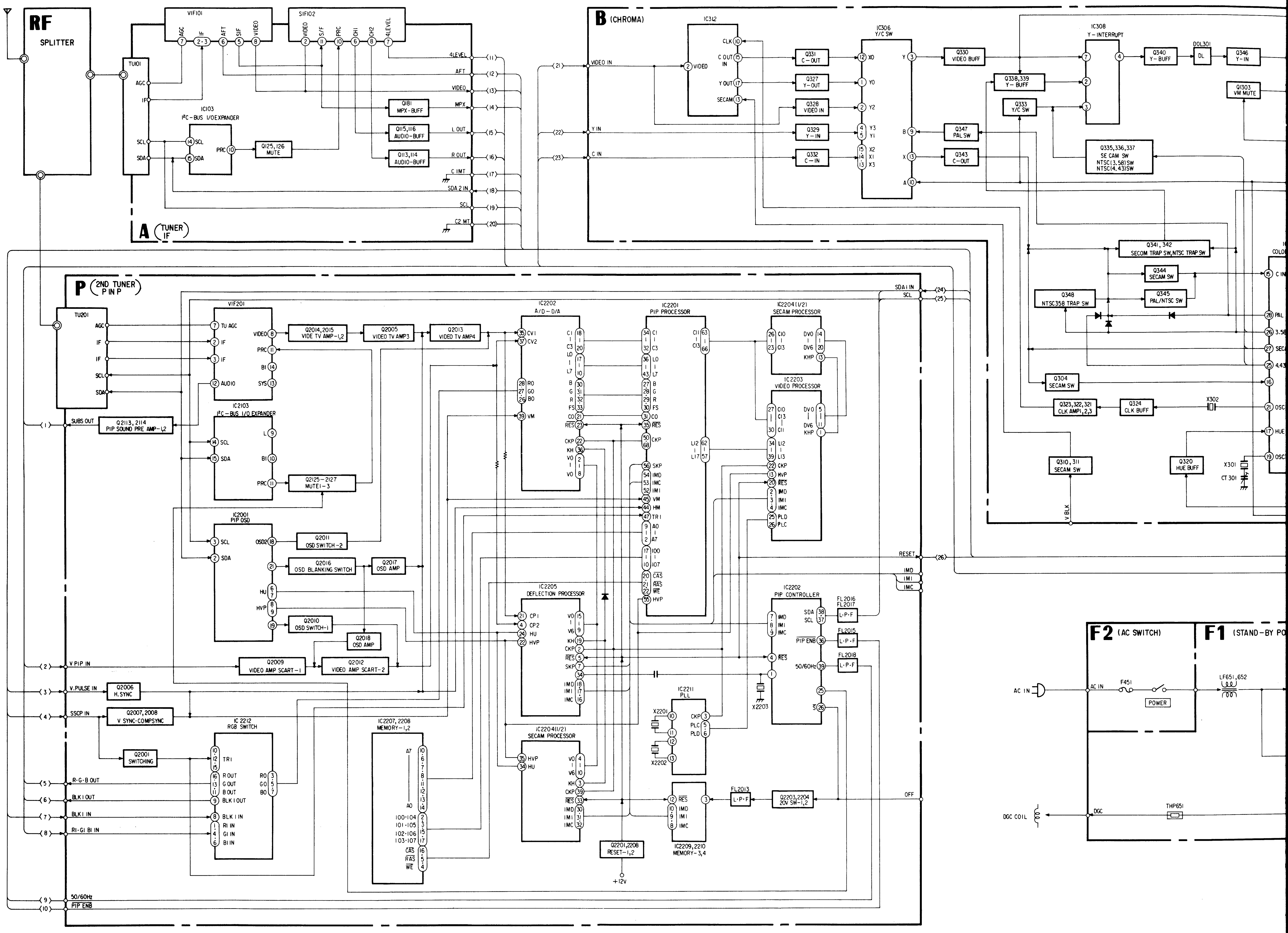
SECTION 5
DIAGRAMS

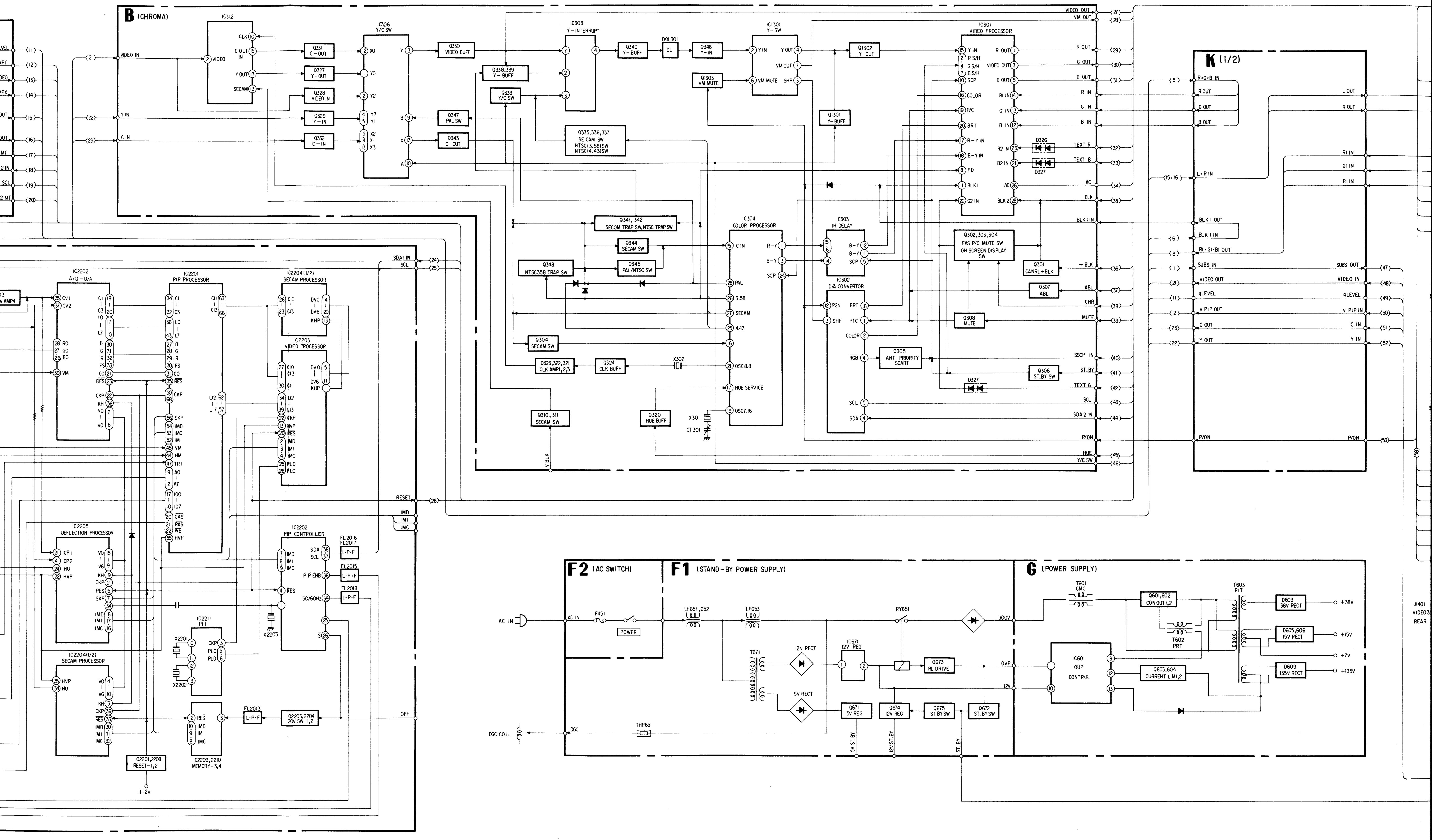
5-1. BLOCK DIAGRAM (1)

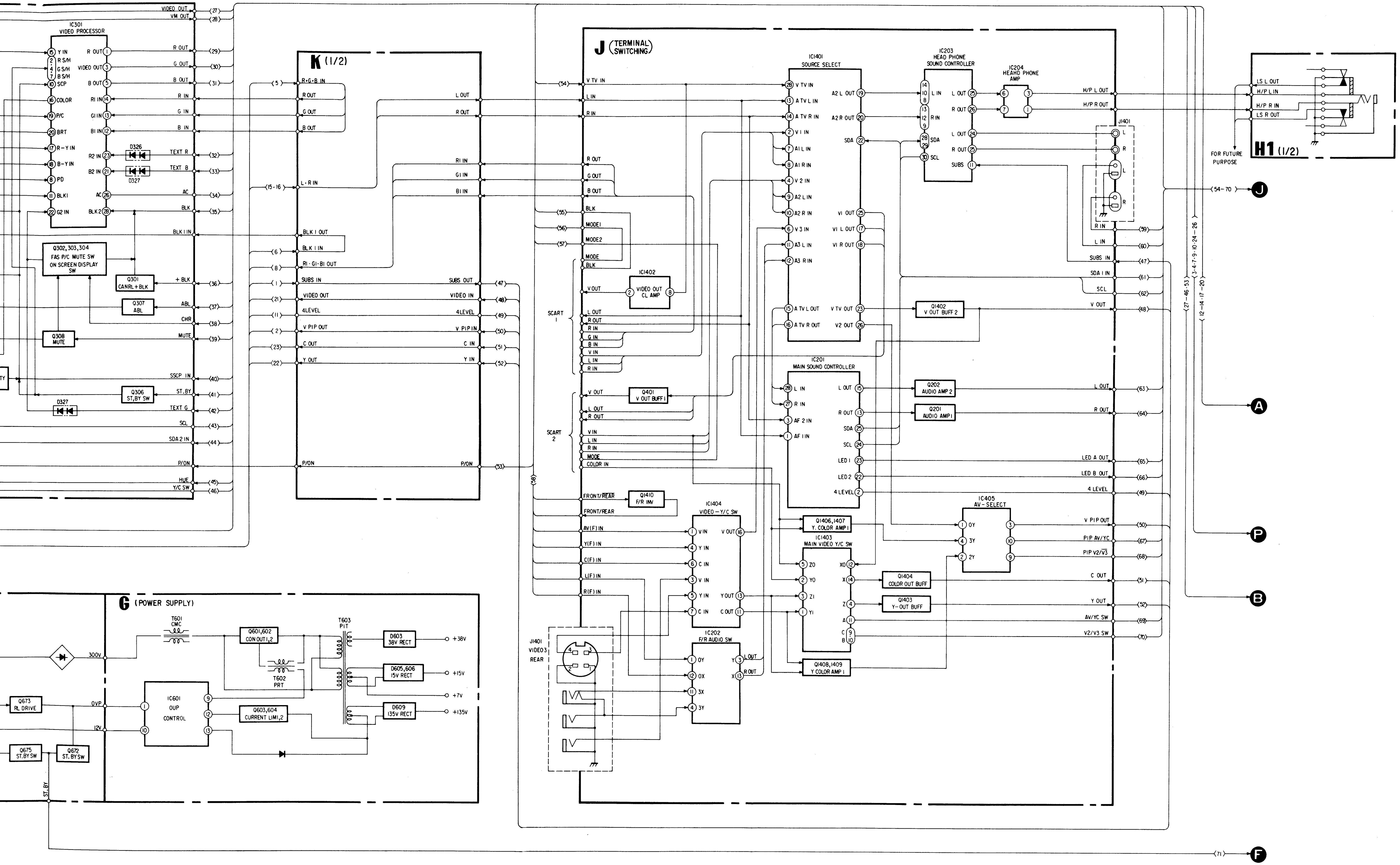

A
TUNER VIF
RF
RF
Splitter
TUNER
UV816PLL
VIF
IFG389S
SIF
IFG5.5S
TV-Video
TV-Sound
H2
IR & L
K
Interafce, mic
Micro
Controller
SDA20560
Sound for
Sub picture
TUNER
VIF
SIF
(Monolal)
PIP Source
Video
VCU2133
BGB
PIP out
A/D
Matrix
BGB
RGB
D/A
PIP
processor
PIP2250
Degital Y/C AV
PAL/NTSC video process
PVPU2204
SECAM video processor
SPU2243
P
Picture in Picture &2nd Tuner/Chroma
J
Video
Switch
Audio
Switch
CX
Video
Switch
TC4052
He
Pho
Cont
TDA7
Video 3
Switch
TEA5114A
Y/C Sw
HD1405
Audio
TC4
Y/C
Video
H1
Front
Terminal
V.Y/C
L.R
HP
Front Y/C AV
V.Y/C
L.R
Video 3 (rear)
V.Y
C
V
L.R
L.R
SCART 2
G
Switching Regulator
135V
15V
7V
AF 38V
F1
Line Filter
ST.BY 5V
DGC
F2
Power SW


TV-Video
TV-Sound
NER VIF
TUNER
VIF
SIF
UV816PLL
IFG389S
IFG5.5S
H2
IR & LED
K
Interafce, micro-controller, audio
Micro Controller SDA20560
Audio Power Amp. TDA2050 (x2)
D
Deflection & convergence
Jungle TEA2028B
V.OUT TDA8170
VM
VM & OP
Picture Tube
Sound for Sub picture
TUNER
VIF
SIF
(Monolal)
PIP Source
Video
CU2133
BGB
PIP out
Matrix
BGB
RGB
D/A
PIP processor PIP2250
Degital Y/C AV
AL/NTSC video process PVPU2204
SECAM video processor SPU2243
ture in Picture &2nd Tuner/Chroma
J
Terminal & Switching
Video Switch
Audio Switch
CXA1114P
Audio SW & Control TDA6200
Video Switch TC4052
Head Phone Control TDA7303
HP AMP TDA 2822M
Speaker OUT
C
Picture Tube drive
B
Chroma
Y
PCF
C
Matrix & Switching TDA4580
PIP Tarl
UV
Color process TDA4660
Color process TDA4650
TV out
Y/C
Video 3 Switch TEA5114A
Y/C Switch HD14053BP
Audio F/R SW TC4052BP
Y/C
Video
H1
Front Terminal
35V
15V
7V
AF 38V
V.Y/C
L.R
HP
Front Y/C AV
V.Y/C
L.R
Video 3 (rear)
V.Y C V L.R L.R
SCART 2
RGB V V L.R L.R
SCART 1
V
Teletext
SDA20162 SAA5231
SAA5243
SAA5243P
TC5563APL
ST.BY 5V
DGC
T2
r SW

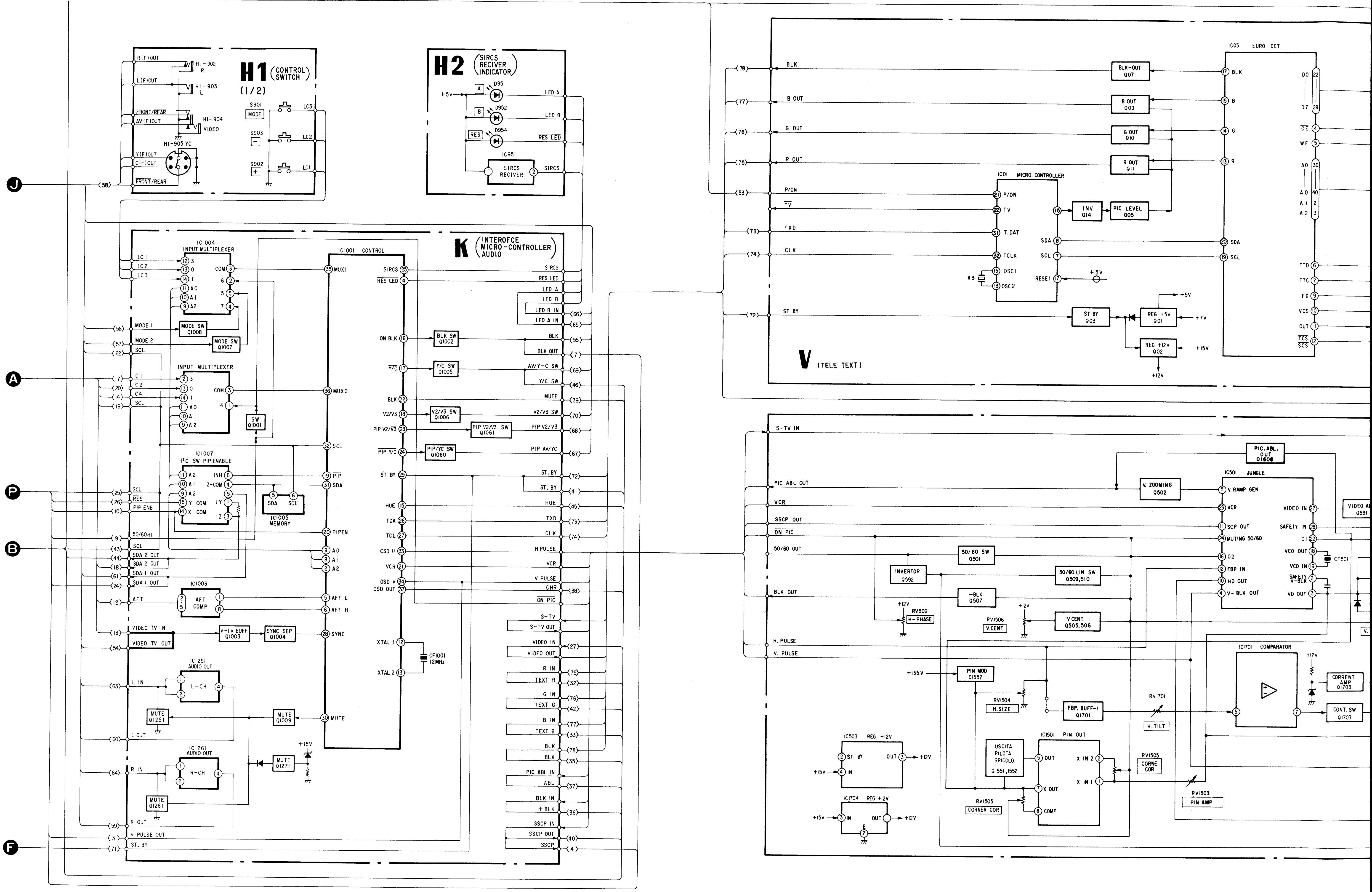
BLOCK DIAGRAM (2)

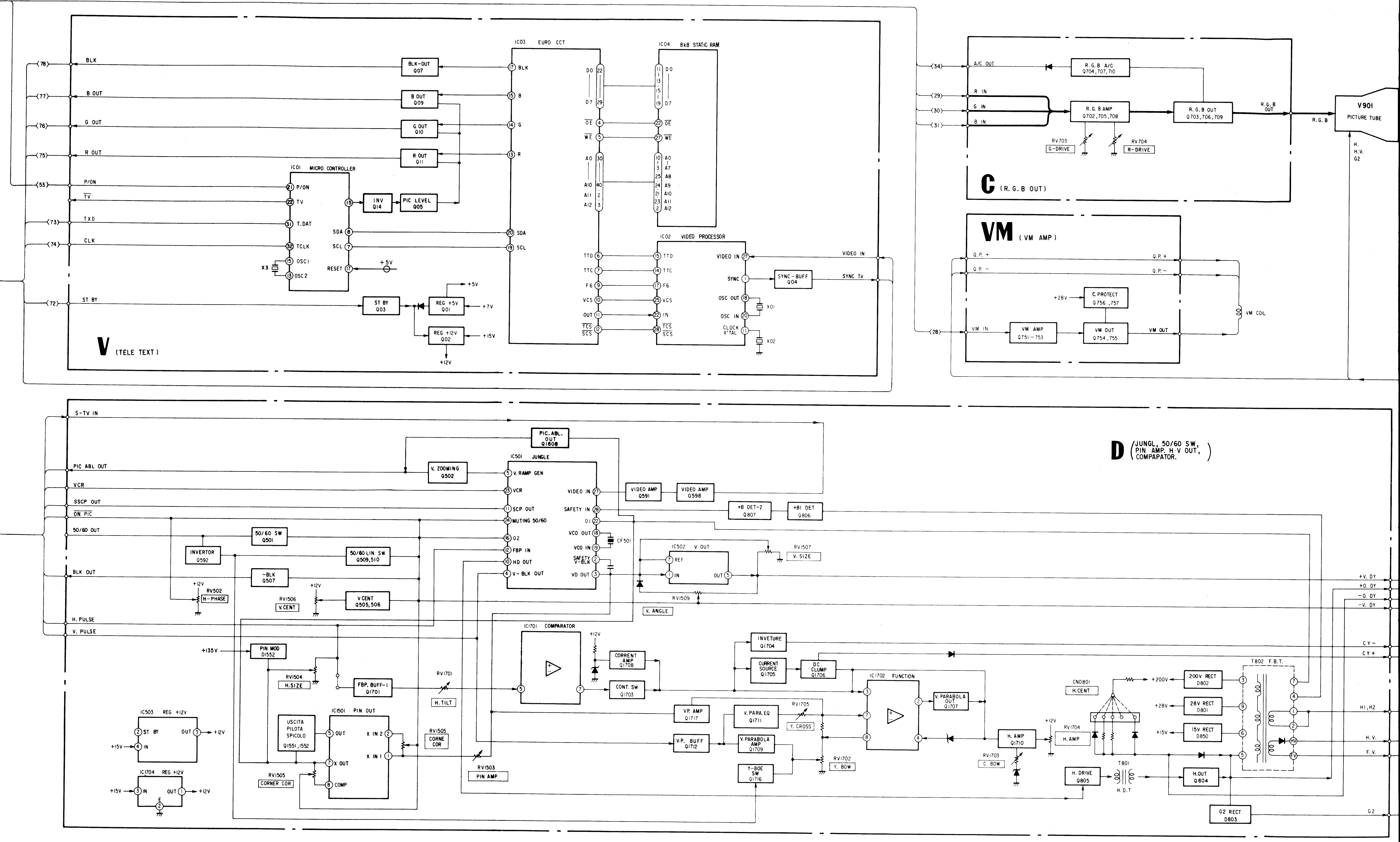

RF
SPLITTER
VIF101
SIF102
TU101
AGC
IF
AFT
SIF
VIDEO
S/F
PRC
CH1
CH2
4LEVEL
IC103
I²C-BUS I/O EXPANDER
SCL
SDA
Q125,126
MUTE
Q181
MPX-BUFF
Q115,116
AUDIO-BUFF
Q113,114
AUDIO-BUFF
MPX
L OUT
R OUT
C IMT
SDA 2 IN
C2 MT
A (TUNER IF)
B (CHROMA)
IC312
CLK
C OUT IN
Y OUT
SECAM
VIDEO IN
Y IN
C IN
Q331
C-OUT
Q327
Y-OUT
Q328
VIDEO IN
Q329
Y-IN
Q332
C-IN
IC306
Y/C SW
Q330
VIDEO BUFF
Q347
PAL SW
Q343
C-OUT
IC308
Y-INTERRUPT
Q338,339
Y-BUFF
Q333
Y/C SW
Q340
Y-BUFF
DDL301
DL
Q346
Y-IN
Q1303
VM MUTE
Q335,336,337
SECAM SW
NTSC(3.58)SW
NTSC(4.43)SW
Q341,342
SECOM TRAP SW,NTSC TRAP SW
Q344
SECAM SW
Q345
PAL/NTSC SW
Q348
NTSC358 TRAP SW
Q304
SECAM SW
Q323,322,321
CLK AMP1,2,3
Q324
CLK BUFF
X302
Q310,311
SECAM SW
Q320
HUE BUFF
X301
CT301
V BLK
COLOR
C IN
PAL
3.58
SECAM
4.43
OSC
HUE
P (2ND TUNER PIN P)
TU201
VIF201
TU AGC
AUDIO
SYS
Q2014,2015
VIDE TV AMP-1,2
Q2005
VIDEO TV AMP3
Q2013
VIDEO TV AMP4
IC2202
A/D-D/A
CV1
CV2
RO
GO
BO
VM
IC2201
PIP PROCESSOR
IC2204(1/2)
SECAM PROCESSOR
IC2203
VIDEO PROCESSOR
IC2103
I²C-BUS I/O EXPANDER
Q2125-2127
MUTE1-3
SUBS OUT
Q2113,2114
PIP SOUND PRE AMP-1,2
IC2001
PIP OSD
Q2011
OSD SWITCH-2
Q2016
OSD BLANKING SWITCH
Q2017
OSD AMP
Q2010
OSD SWITCH-1
Q2018
OSD AMP
IC2205
DEFLECTION PROCESSOR
IC2202
PIP CONTROLLER
FL2016
FL2017
FL2015
FL2018
L·P·F
PIP ENB
50/60Hz
RESET
IMD
IMI
IMC
V PIP IN
Q2009
VIDEO AMP SCART-1
Q2012
VIDEO AMP SCART-2
V.PULSE IN
Q2006
H.SYNC
SSCP IN
Q2007,2008
V SYNC-COMPSYNC
Q2001
SWITCHING
IC2212
RGB SWITCH
R-G-B OUT
BLK I OUT
BLK I IN
RI-GI BI IN
IC2207,2208
MEMORY-1,2
IC2204(1/2)
SECAM PROCESSOR
IC2211
PLL
X2201
X2202
X2203
Q2201,2208
RESET-1,2
+12V
IC2209,2210
MEMORY-3,4
FL2013
Q2203,2204
20V SW-1,2
OFF
SDA1 IN
SCL
F2 (AC SWITCH)
F1 (STAND-BY PO
AC IN
F451
POWER
LF651,652
DGC COIL
DGC
THP651

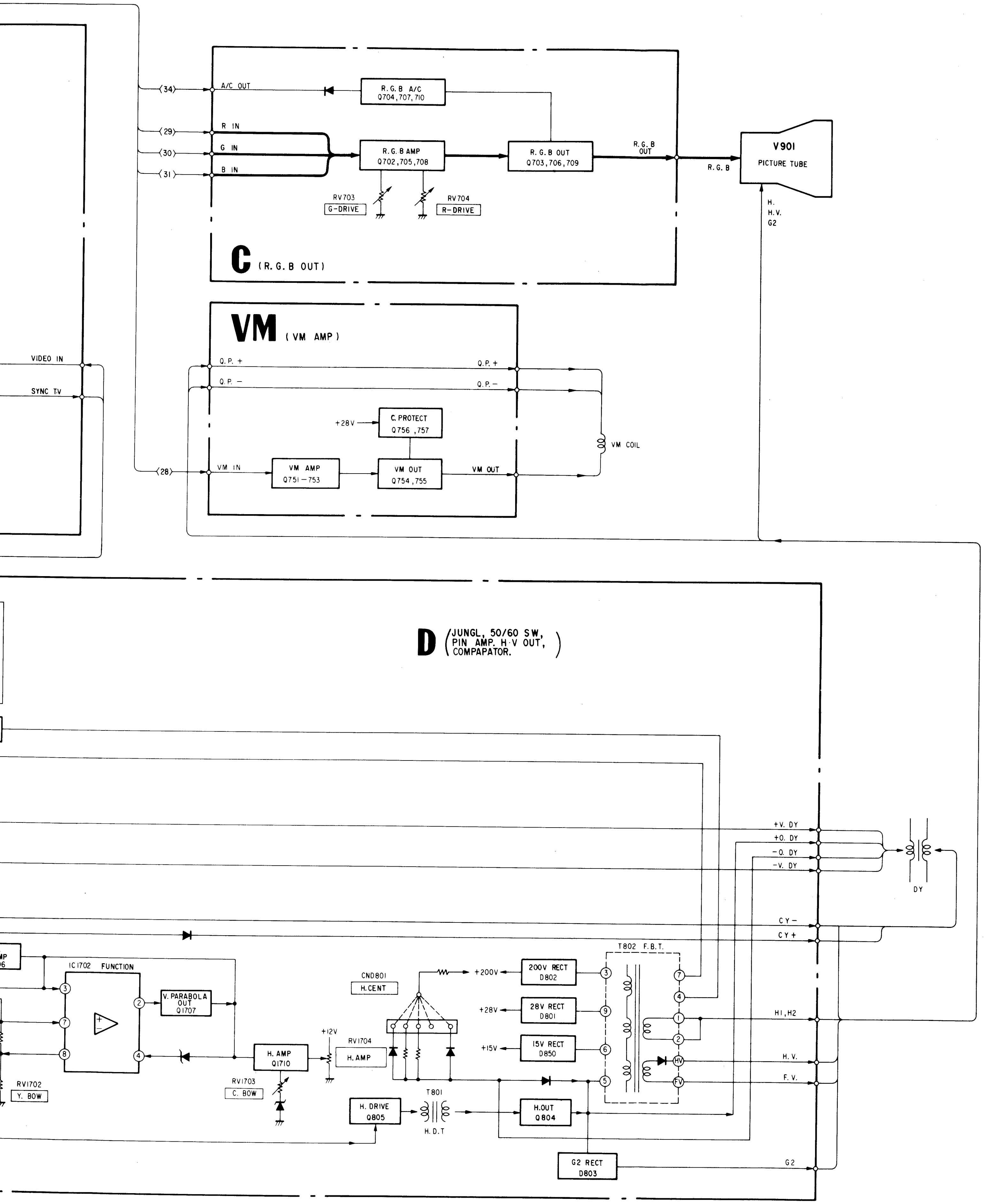

B (CHROMA)
IC312
IC306 Y/C SW
IC308 Y - INTERRUPT
DL301
IC1301 Y - SW
IC301 VIDEO PROCESSOR
Q331 C-OUT
Q327 Y-OUT
Q328 VIDEO IN
Q329 Y-IN
Q332 C-IN
Q330 VIDEO BUFF
Q347 PAL SW
Q343 C-OUT
Q338,339 Y-BUFF
Q333 Y/C SW
Q340 Y-BUFF
Q346 Y-IN
Q1303 VM MUTE
Q1302 Y-OUT
Q1301 Y-BUFF
Q335,336,337 SECAM SW NTSC(3.58)SW NTSC(4.43)SW
D326
D327
VIDEO IN
Y IN
C IN
VIDEO OUT
VM OUT
R OUT
G OUT
B OUT
R IN
G IN
B IN
TEXT R
TEXT B
AC
BLK
BLK I IN
+BLK
ABL
CHR
MUTE
SSCP IN
ST.BY
TEXT G
SCL
SDA 2 IN
P/ON
HUE
Y/C SW
Q341,342 SECOM TRAP SW,NTSC TRAP SW
Q344 SECAM SW
Q345 PAL/NTSC SW
Q348 NTSC358 TRAP SW
IC304 COLOR PROCESSOR
IC303 1H DELAY
IC302 D/A CONVERTOR
Q302,303,304 FAS P/C MUTE SW ON SCREEN DISPLAY SW
Q301 CANRL+BLK
Q307 ABL
Q308 MUTE
Q305 ANTI PRIORITY SCART
Q306 ST,BY SW
Q304 SECAM SW
Q323,322,321 CLK AMP1,2,3
Q324 CLK BUFF
X302
Q310,311 SECAM SW
Q320 HUE BUFF
X301
CT301
V BLK
K (1/2)
R·G·B IN
L OUT
R OUT
L·R IN
BLK I OUT
BLK I IN
RI·GI·BI OUT
SUBS IN
SUBS OUT
VIDEO OUT
VIDEO IN
4LEVEL
V PIP OUT
V PIP IN
C OUT
C IN
Y OUT
Y IN
P/ON
IC2202 A/D-D/A
IC2201 PIP PROCESSOR
IC2204(1/2) SECAM PROCESSOR
IC2203 VIDEO PROCESSOR
IC2205 DEFLECTION PROCESSOR
IC2202 PIP CONTROLLER
IC2211 PLL
IC2204(1/2) SECAM PROCESSOR
IC2209,2210 MEMORY-3,4
Q2201,2208 RESET-1,2
Q2203,2204 20V SW-1,2
FL2013 L·P·F
FL2016 FL2017 L·P·F
FL2015 L·P·F
FL2018 L·P·F
X2201
X2202
X2203
SDA1 IN
SCL
RESET
IMD
IMI
IMC
OFF
+12V
F2 (AC SWITCH)
F1 (STAND-BY POWER SUPPLY)
G (POWER SUPPLY)
AC IN
F451
POWER
LF651,652
LF653
T671
12V RECT
5V RECT
IC671 12V REG
RY651
Q673 RL DRIVE
Q671 5V REG
Q674 12V REG
Q675 ST.BY SW
Q672 ST.BY SW
THP651
DGC COIL
DGC
5V ST.BY
12V ST.BY
ST.BY
300V
OVP
12V
T601 CMC
Q601,602 CONVOUT1,2
T602 PRT
T603 PIT
IC601 OVP CONTROL
Q603,604 CURRENT LIMI1,2
D603 38V RECT
Q605,606 15V RECT
D609 135V RECT
+38V
+15V
+7V
+135V
J1401 VIDEO3 REAR


IC301 VIDEO PROCESSOR
Y IN
R S/H
G S/H
B S/H
SCP
COLOR
P/C
BRT
R-Y IN
B-Y IN
PD
BLKI
G2 IN
R OUT
VIDEO OUT
G OUT
B OUT
RI IN
GI IN
BI IN
R2 IN
B2 IN
AC
BLK 2
VIDEO OUT
VM OUT
TEXT R
TEXT B
D326
D327
BLK
BLK I IN
+BLK
ABL
CHR
MUTE
SSCP IN
ST.BY
TEXT G
SCL
SDA 2 IN
P/ON
HUE
Y/C SW
Q302,303,304 FAS P/C MUTE SW ON SCREEN DISPLAY SW
Q301 CANRL+BLK
Q307 ABL
Q308 MUTE
Q306 ST,BY SW
K (1/2)
R·G·B IN
R OUT
G OUT
B OUT
L·R IN
BLK I OUT
BLK I IN
RI·GI·BI OUT
SUBS IN
VIDEO OUT
4LEVEL
V PIP OUT
C OUT
Y OUT
L OUT
R OUT
RI IN
GI IN
BI IN
SUBS OUT
VIDEO IN
V PIP IN
C IN
Y IN
P/ON
J (TERMINAL SWITCHING)
V TV IN
L IN
R IN
MODE1
MODE2
MODE
SCART 1
SCART 2
V OUT
L OUT
R OUT
G IN
B IN
V IN
COLOR IN
FRONT/REAR
AV(F) IN
Y(F) IN
C(F) IN
L(F) IN
R(F) IN
IC1402 VIDEO OUT CL AMP
Q401 V OUT BUFF 1
Q1410 F/R INV
IC1401 SOURCE SELECT
V TV IN
A TV L IN
A TV R IN
V 1 IN
A1 L IN
A1 R IN
V 2 IN
A2 L IN
A2 R IN
V 3 IN
A3 L IN
A3 R IN
A TV L OUT
A TV R OUT
A2 L OUT
A2 R OUT
SDA
V1 OUT
V1 L OUT
V1 R OUT
V TV OUT
V2 OUT
Q1402 V OUT BUFF 2
IC201 MAIN SOUND CONTROLLER
L IN
R IN
AF 2 IN
AF 1 IN
L OUT
R OUT
SDA
SCL
LED 1
LED 2
4 LEVEL
Q202 AUDIO AMP 2
Q201 AUDIO AMP 1
IC203 HEAD PHONE SOUND CONTROLLER
SUBS
IC204 HEAD PHONE AMP
J1401
H/P L OUT
H/P R OUT
LS L OUT
H/P L IN
H/P R IN
LS R OUT
H1 (1/2)
FOR FUTURE PURPOSE
IC1404 VIDEO-Y/C SW
IC1403 MAIN VIDEO Y/C SW
Q1406,1407 Y. COLOR AMP 1
Q1408,1409 Y COLOR AMP 1
Q1404 COLOR OUT BUFF
Q1403 Y-OUT BUFF
IC405 AV-SELECT
V PIP OUT
PIP AV/YC
PIP V2/V3
C OUT
Y OUT
AV/YC SW
V2/V3 SW
LED A OUT
LED B OUT
4 LEVEL
SUBS IN
SDA 1 IN
IC202 F/R AUDIO SW
J1401 VIDEO3 REAR
G (POWER SUPPLY)
T601 CMC
Q601,602 CON OUT 1,2
T602 PRT
T603 PIT
D603 38V RECT
D605,606 15V RECT
D609 135V RECT
+38V
+15V
+7V
+135V
300V
IC601 OUP CONTROL
Q603,604 CURRENT LIMI,2
Q673 RL DRIVE
Q675 ST.BY SW
Q672 ST.BY SW
OVP
12V
ST.BY
J
A
P
B
F

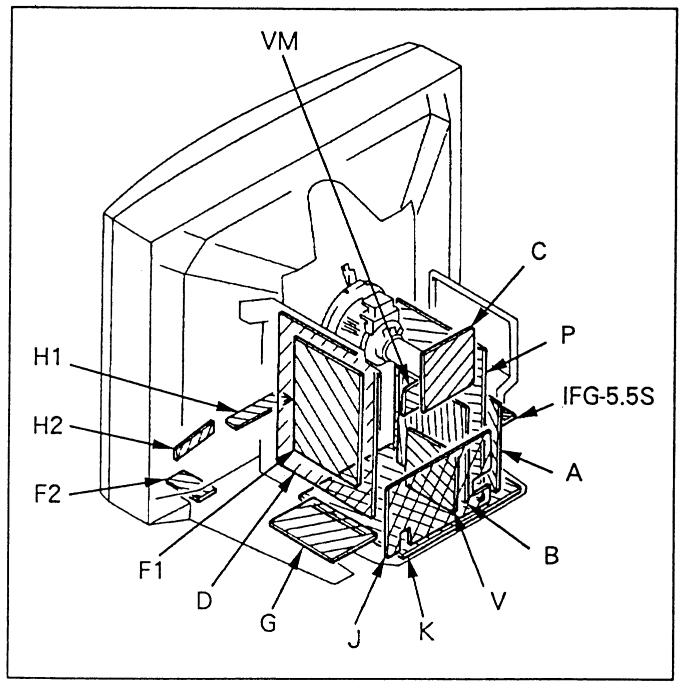
BLOCK DIAGRAM (3)


H1 (CONTROL SWITCH) (1/2)
R(F)OUT
L(F)OUT
HI-902 R
HI-903 L
FRONT/REAR
AV(F)OUT
HI-904 VIDEO
HI-905 YC
Y(F)OUT
C(F)OUT
FRONT/REAR
S901 MODE
S903 −
S902 +
LC3
LC2
LC1
H2 (SIRCS RECIVER INDICATOR)
+5V
A D951
B D952
RES D954
LED A
LED B
RES LED
IC951 SIRCS RECIVER
SIRCS
K (INTEROFCE MICRO-CONTROLLER AUDIO)
IC1004 INPUT MULTIPLEXER
IC1001 CONTROL
MUX1
MUX2
SIRCS
RES LED
ON BLK
BLK SW Q1002
Y/C SW Q1005
V2/V3 SW Q1006
PIP V2/V3 SW Q1061
PIP/YC SW Q1060
MODE SW Q1008
MODE SW Q1007
INPUT MULTIPLEXER
SW Q1001
IC1007 I²C SW PIP ENABLE
IC1005 MEMORY
SDA
SCL
PIPEN
IC1003 AFT COMP
AFT L
AFT H
V-TV BUFF Q1003
SYNC SEP Q1004
SYNC
XTAL 1
XTAL 2
CF1001 12MHz
IC1251 AUDIO OUT L-CH
MUTE Q1251
MUTE Q1009
MUTE
IC1261 AUDIO OUT R-CH
MUTE Q1261
MUTE Q1271
+15V
MODE 1
MODE 2
SCL
C1
C2
C4
SCL
RES
PIP ENB
50/60Hz
SDA 2 OUT
SDA 1 OUT
AFT
VIDEO TV IN
VIDEO TV OUT
L IN
L OUT
R IN
R OUT
V PULSE OUT
ST. BY
ST BY
HUE
TDA
TCL
CSD H
VCR
OSD V
OSD OUT
LED B IN
LED A IN
BLK
BLK OUT
AV/Y-C SW
Y/C SW
MUTE
V2/V3 SW
PIP V2/V3
PIP AV/YC
TXD
CLK
H PULSE
V PULSE
CHR
ON PIC
S-TV
S-TV OUT
VIDEO IN
VIDEO OUT
R IN
TEXT R
G IN
TEXT G
B IN
TEXT B
PIC ABL IN
ABL
BLK IN
+BLK
SSCP IN
SSCP OUT
SSCP
J
A
P
B
F
V (TELE TEXT)
IC03 EURO CCT
BLK-OUT Q07
B OUT Q09
G OUT Q10
R OUT Q11
IC01 MICRO CONTROLLER
P/ON
TV
T.DAT
TCLK
OSC1
OSC2
X3
RESET
INV Q14
PIC LEVEL Q05
ST BY Q03
REG +5V Q01
REG +12V Q02
+5V
+7V
+15V
+12V
D0
D7
OE
WE
A0
A10
A11
A12
TTD
TTC
F6
VCS
OUT
TCS
SCS
S-TV IN
PIC ABL OUT
VCR
SSCP OUT
ON PIC
50/60 OUT
BLK OUT
H. PULSE
V. PULSE
PIC. ABL. OUT Q1608
IC501 JUNGLE
V. ZOOMING Q502
V. RAMP GEN
SCP OUT
MUTING 50/60
O2
FBP IN
HD OUT
V-BLK OUT
VIDEO IN
SAFETY IN
VCO OUT
VCO IN
SAFETY V-BLK
VD OUT
CF501
VIDEO AMP Q591
50/60 SW Q501
INVERTOR Q592
50/60 LIN SW Q509,510
-BLK Q507
RV502 H-PHASE
RV1506 V.CENT
V CENT Q505,506
+135V
PIN MOD D1552
RV1504 H.SIZE
FBP. BUFF-I Q1701
RV1701 H.TILT
IC1701 COMPARATOR
CURRENT AMP Q1708
CONT. SW Q1703
IC503 REG +12V
IC1704 REG +12V
USCITA PILOTA SPICOLO Q1551,1552
IC1501 PIN OUT
X IN 2
X IN 1
X OUT
COMP
RV1505 CORNER COR
RV1503 PIN AMP


V (TELE TEXT)
BLK
B OUT
G OUT
R OUT
P/ON
TV
TXD
CLK
ST BY
BLK-OUT Q07
B OUT Q09
G OUT Q10
R OUT Q11
IC01 MICRO CONTROLLER
P/ON
T.DAT
TCLK
OSC1
OSC2
SDA
SCL
RESET
X3
INV Q14
PIC LEVEL Q05
+5V
ST BY Q03
REG +5V Q01
REG +12V Q02
+7V
+15V
+12V
IC03 EURO CCT
IC04 8kB STATIC RAM
IC02 VIDEO PROCESSOR
VIDEO IN
SYNC
SYNC-BUFF Q04
SYNC TV
OSC OUT
OSC IN
CLOCK X'TAL
X01
X02
TTD
TTC
F6
VCS
TCS
SCS
OE
WE
C (R.G.B OUT)
A/C OUT
R IN
G IN
B IN
R.G.B A/C Q704,707,710
R.G.B AMP Q702,705,708
R.G.B OUT Q703,706,709
RV703 G-DRIVE
RV704 R-DRIVE
R.G.B OUT
R.G.B
V901 PICTURE TUBE
H.
H.V.
G2
VM (VM AMP)
Q.P. +
Q.P. −
+28V
C.PROTECT Q756,757
VM IN
VM AMP Q751-753
VM OUT Q754,755
VM OUT
VM COIL
D (JUNGL, 50/60 SW, PIN AMP, H-V OUT, COMPAPATOR.)
S-TV IN
PIC ABL OUT
VCR
SSCP OUT
ON PIC
50/60 OUT
BLK OUT
H. PULSE
V. PULSE
PIC.ABL. OUT Q1608
V. ZOOMING Q502
IC501 JUNGLE
V. RAMP GEN
SCP OUT
MUTING 50/60
O2
FBP IN
HD OUT
V-BLK OUT
VIDEO IN
SAFETY IN
O1
VCO OUT
VCO IN
SAFETY V-BLK
VD OUT
CF501
VIDEO AMP Q591
VIDEO AMP Q598
+B DET-2 Q807
+B1 DET Q806
50/60 SW Q501
INVERTOR Q592
50/60 LIN SW Q509,510
-BLK Q507
RV502 H-PHASE
RV1506 V.CENT
V CENT Q505,506
IC502 V OUT
REF
RV1507 V. SIZE
RV1509
V. ANGLE
+135V
PIN MOD D1552
RV1504 H.SIZE
FBP. BUFF-1 Q1701
RV1701 H. TILT
IC1701 COMPARATOR
CURRENT AMP Q1708
CONT. SW Q1703
INVETURE Q1704
CURRENT SOURCE Q1705
D.C. CLUMP Q1706
IC1702 FUNCTION
V. PARABOLA OUT Q1707
V.P. AMP Q1717
V. PARA. EQ Q1711
RV1705 Y. CROSS
V.P. BUFF Q1712
V. PARABOLA AMP Q1709
Y-BOE SW Q1716
RV1702 Y. BOW
IC1501 PIN OUT
USCITA PILOTA SPICOLO Q1551,1552
X IN 2
X IN 1
X OUT
COMP
RV1505 CORNE COR
RV1505 CORNER COR
RV1503 PIN AMP
IC1503 REG +12V
IC1704 REG +12V
ST BY
IN
OUT
E
CND801 H.CENT
RV1704 H. AMP
H. AMP Q1710
RV1703 C. BOW
H. DRIVE Q805
T801 H.D.T
H.OUT Q804
G2 RECT D803
+200V
200V RECT D802
28V RECT D801
15V RECT D850
T802 F.B.T.
HV
FV
+V. DY
+O. DY
−O. DY
−V. DY
CY−
CY+
H1,H2
H. V.
F. V.
G2


(34)
A/C OUT
R.G.B A/C
Q704,707,710
(29)
R IN
(30)
G IN
(31)
B IN
R.G.B AMP
Q702,705,708
R.G.B OUT
Q703,706,709
R.G.B
OUT
R.G.B
V901
PICTURE TUBE
H.
H.V.
G2
RV703
G-DRIVE
RV704
R-DRIVE
C (R.G.B OUT)
VM (VM AMP)
VIDEO IN
SYNC TV
Q.P. +
Q.P. −
Q.P. +
Q.P. −
+28V
C.PROTECT
Q756,757
VM COIL
(28)
VM IN
VM AMP
Q751−753
VM OUT
Q754,755
VM OUT
D (JUNGL, 50/60 SW, PIN AMP, H·V OUT, COMPAPATOR.)
+V. DY
+O. DY
−O. DY
−V. DY
DY
CY−
CY+
MP
06
IC1702 FUNCTION
3
7
8
2
4
V.PARABOLA OUT
Q1707
RV1702
Y. BOW
RV1703
C. BOW
H. AMP
Q1710
+12V
RV1704
H. AMP
CND801
H.CENT
+200V
+28V
+15V
200V RECT
D802
28V RECT
D801
15V RECT
D850
T802 F.B.T.
3
9
6
5
7
4
1
2
HV
FV
H1,H2
H. V.
F. V.
H. DRIVE
Q805
T801
H.D.T
H.OUT
Q804
G2 RECT
D803
G2

5-2. CIRCUIT BOARDS LOCATION


VM
C
P
H1
IFG-5.5S
H2
A
F2
B
F1
D
G
J
K
V

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ✱	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

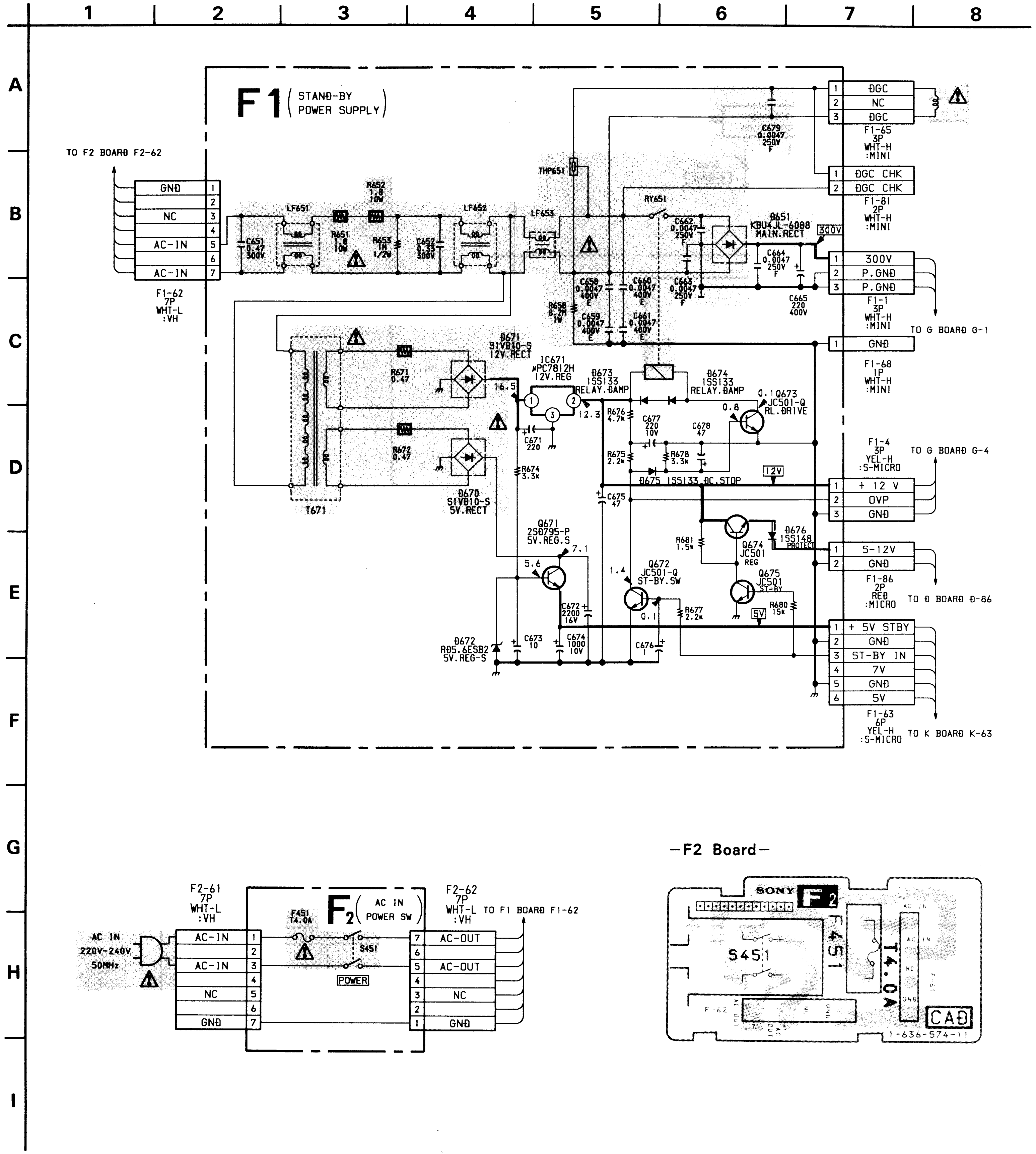
Note :

- All capacitors are in μF unless otherwise noted.
  pF : μμF 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

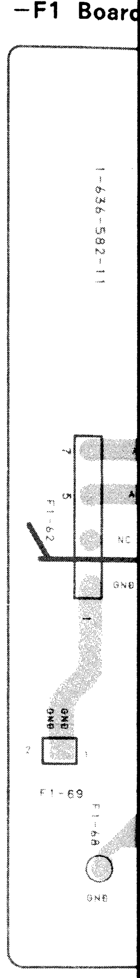
Pitch : 5mm
Rating electrical power : 1/4W

- Chip resistor is in 1/10W.
- All resistors are in ohms. kΩ = 1000Ω, MΩ = 1000k Ω
- : nonflammable resistor.
- : fusible resistor.
- Δ : internal component.
- ☐ : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B.unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- ━━━ : B + line.
- ▨ : signal path

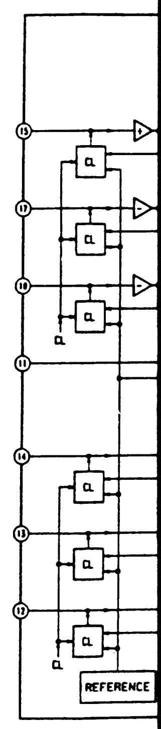
5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

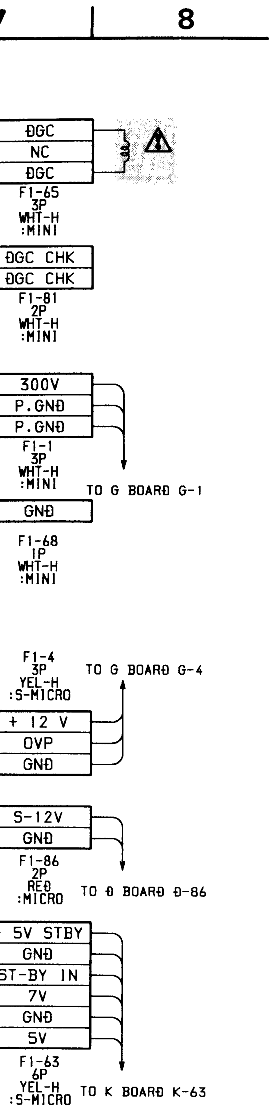

1 2 3 4 5 6 7 8
A B C D E F G H I
F1 (STAND-BY POWER SUPPLY)
TO F2 BOARD F2-62
GND
NC
AC-IN
AC-IN
F1-62 7P WHT-L :VH
LF651
LF652
LF653
R652 1.8 10W
R651 1.8 10W
R653 1M 1/2W
C651 0.47 300V
C652 0.33 300V
THP651
RY651
C679 0.0047 250V F
C662 0.0047 250V
D651 KBU4JL-6088 MAIN.RECT
300V
C664 0.0047 250V F
C665 220 400V
C658 0.0047 400V E
C660 0.0047 400V E
C663 0.0047 250V F
C659 0.0047 400V E
C661 0.0047 400V E
R658 8.2M 1W
DGC
NC
DGC
F1-65 3P WHT-H :MINI
DGC CHK
DGC CHK
F1-81 2P WHT-H :MINI
300V
P.GND
P.GND
F1-1 3P WHT-H :MINI
TO G BOARD G-1
GND
F1-68 1P WHT-H :MINI
T671
R671 0.47
R672 0.47
D671 S1VB10-S 12V.RECT
D670 S1VB10-S 5V.RECT
IC671 μPC7812H 12V.REG
16.5
12.3
C671 220
R674 3.3k
D673 1SS133 RELAY.DAMP
D674 1SS133 RELAY.DAMP
Q673 JC501-Q RL.DRIVE
R676 4.7k
C677 220 10V
C678 47
R675 2.2k
R678 3.3k
D675 1SS133 AC.STOP
12V
C675 47
F1-4 3P YEL-H :S-MICRO
TO G BOARD G-4
+ 12 V
OVP
GND
Q671 2SD795-P 5V.REG.S
R681 1.5k
Q674 JC501 REG
D676 1SS148 PROTECT
Q672 JC501-Q ST-BY.SW
Q675 JC501 ST-BY
R677 2.2k
R680 15k
5V
C672 2200 16V
C673 10
C674 1000 10V
C676 1
D672 RD5.6ESB2 5V.REG-S
S-12V
GND
F1-86 2P RED :MICRO
TO D BOARD D-86
+ 5V STBY
GND
ST-BY IN
7V
GND
5V
F1-63 6P YEL-H :S-MICRO
TO K BOARD K-63
AC IN 220V-240V 50MHz
F2-61 7P WHT-L :VH
AC-IN
AC-IN
NC
GND
F2 (AC IN POWER SW)
F451 T4.0A
S451
POWER
F2-62 7P WHT-L :VH
TO F1 BOARD F1-62
AC-OUT
AC-OUT
NC
GND
-F2 Board-
SONY F2
F451
S451
T4.0A
CAD
1-636-574-11

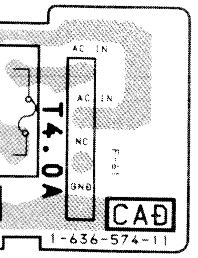
-F1 Board


1-636-582-11
F1-62
F1-69
F1-68

B BOARD

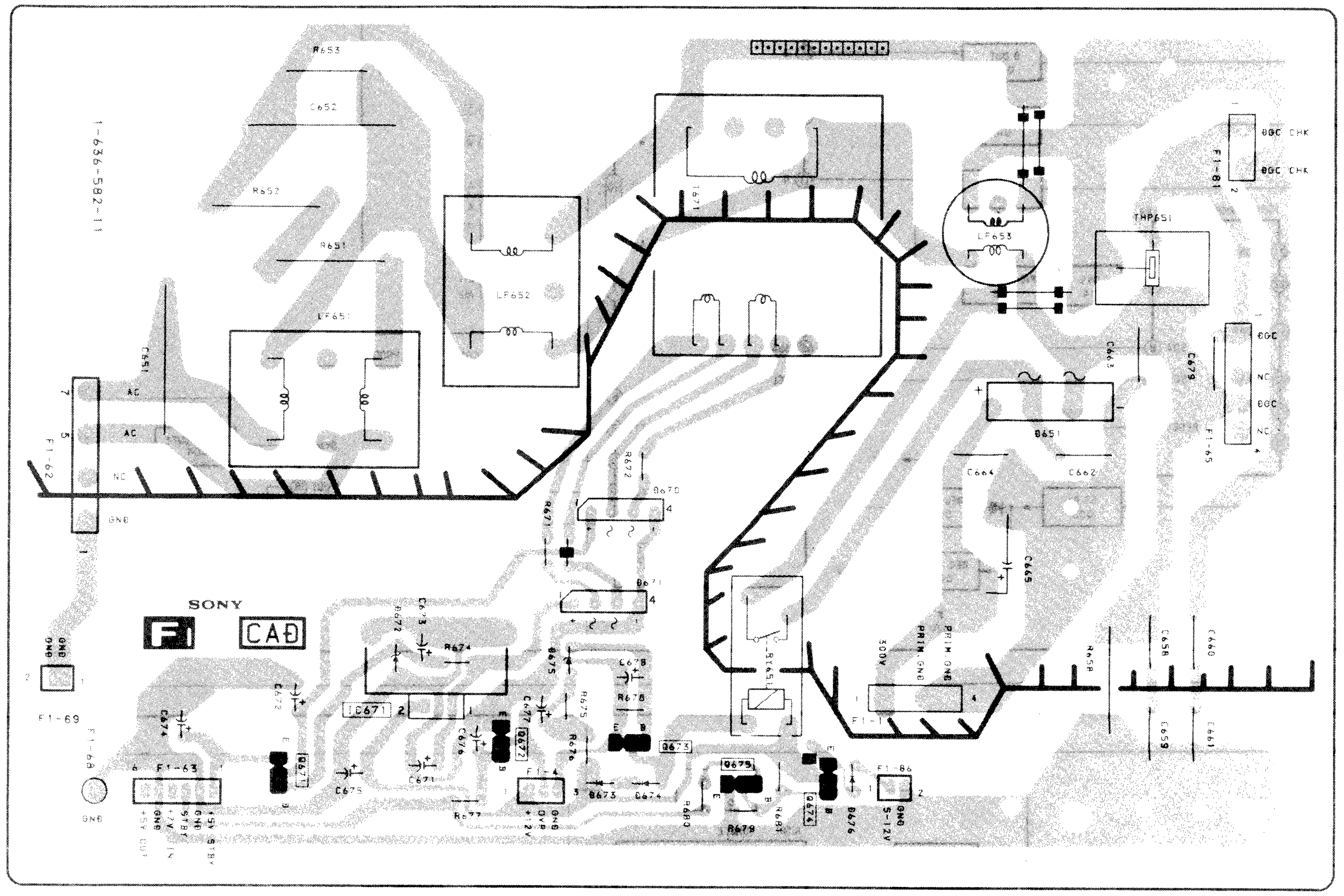



8
ÐGC
NC
ÐGC
F1-65
3P
WHT-H
:MINI
ÐGC CHK
ÐGC CHK
F1-81
2P
WHT-H
:MINI
300V
P.GNÐ
P.GNÐ
F1-1
3P
WHT-H
:MINI
TO G BOARÐ G-1
GNÐ
F1-68
1P
WHT-H
:MINI
F1-4
3P
YEL-H
:S-MICRO
TO G BOARÐ G-4
+ 12 V
OVP
GNÐ
S-12V
GNÐ
F1-86
2P
REÐ
:MICRO
TO Ð BOARÐ Ð-86
5V STBY
GNÐ
ST-BY IN
7V
GNÐ
5V
F1-63
6P
YEL-H
:S-MICRO
TO K BOARÐ K-63

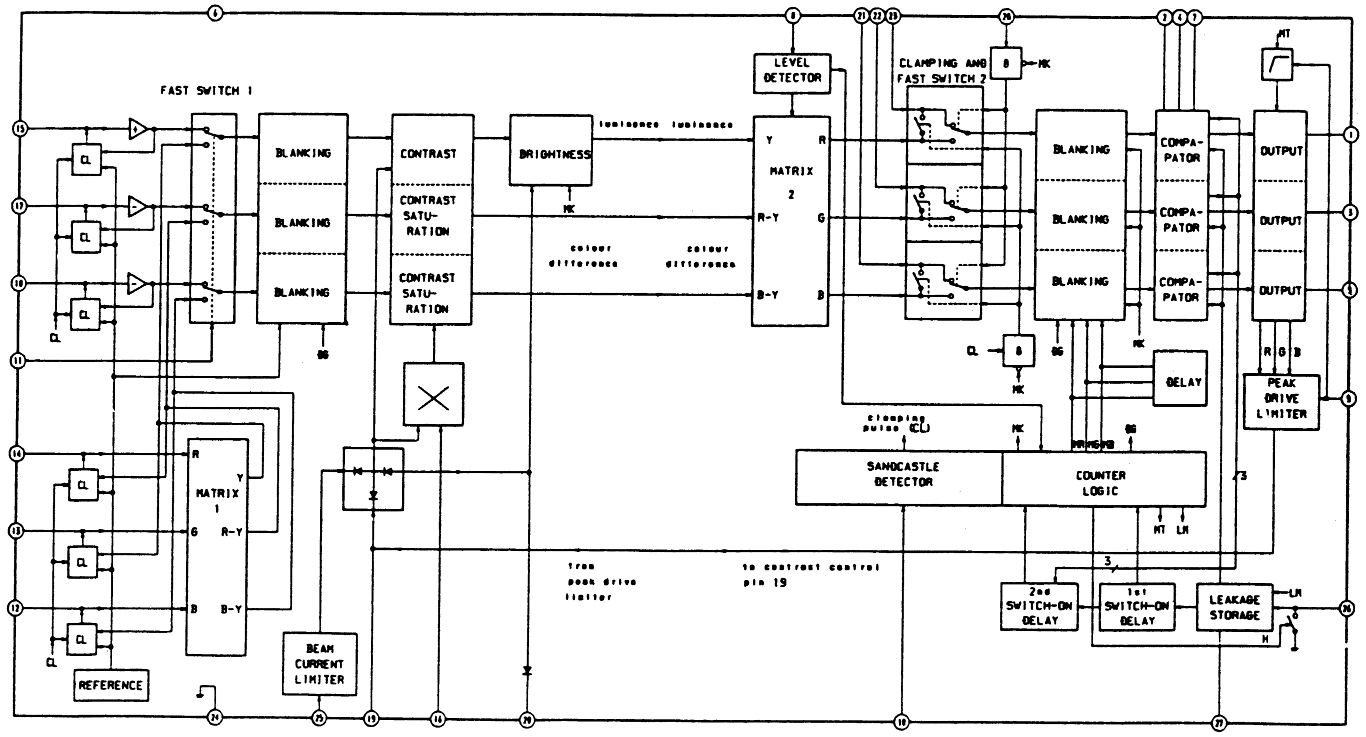

AC IN
AC IN
NC
GND
F-61
T4.0A
CAD
1-636-574-11

F1 [STAND-BY, POWER SUPPLY] F2 [AC IN, POWER SW] B [VIDEO PROCESSOR, Y/C SWITCH COLOR PROCESSOR, SHARPNESS CONTROL]

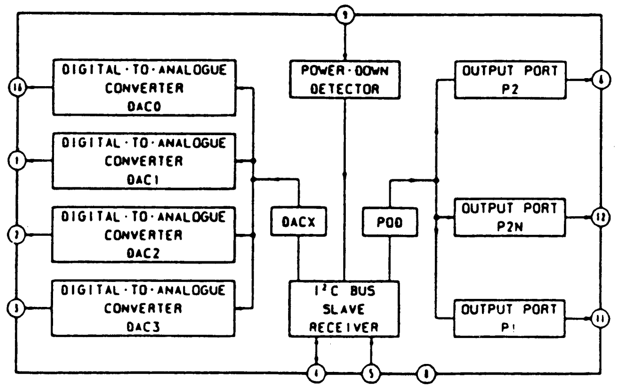
–F1 Board–


1-636-582-11
SONY
F1
CAD
LF651
LF652
LF653
THP651
D651
IC671
F1-62
F1-63
F1-65
F1-69
F1-81
F1-86
F1-68
F1-4
ÐGC CHK
ÐGC
NC
AC
GND
S-12V
500V
PRIM GND

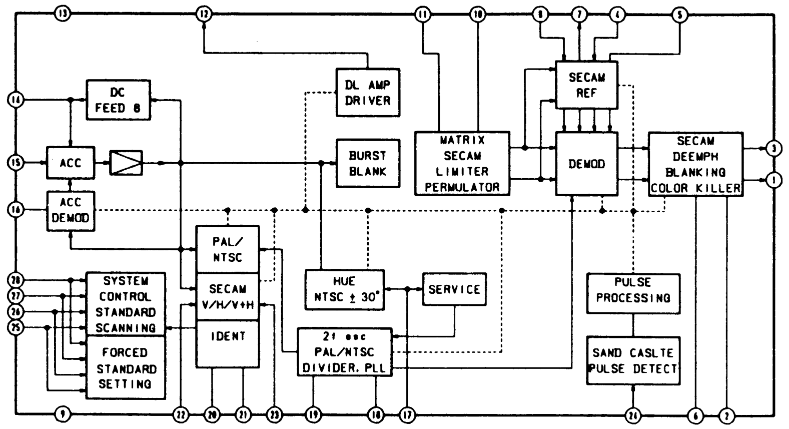
B BOARD IC301 TDA4580-V4


FAST SWITCH 1
CL
BLANKING
BLANKING
BLANKING
CONTRAST
CONTRAST SATU-RATION
CONTRAST SATU-RATION
BRIGHTNESS
luminance
luminance
colour difference
colour difference
LEVEL DETECTOR
Y
R
MATRIX 2
R-Y
G
B-Y
B
CLAMPING AND FAST SWITCH 2
BLANKING
BLANKING
BLANKING
COMPA-PATOR
COMPA-PATOR
COMPA-PATOR
OUTPUT
OUTPUT
OUTPUT
HT
HK
BG
DELAY
R G B
PEAK DRIVE LIMITER
clamping pulse (CL)
SANDCASTLE DETECTOR
COUNTER LOGIC
HT LH
MATRIX 1
R
G
B
Y
R-Y
B-Y
REFERENCE
BEAM CURRENT LIMITER
from peak drive limiter
to contrast control pin 19
2nd SWITCH-ON DELAY
1st SWITCH-ON DELAY
LEAKAGE STORAGE
LH
H
3

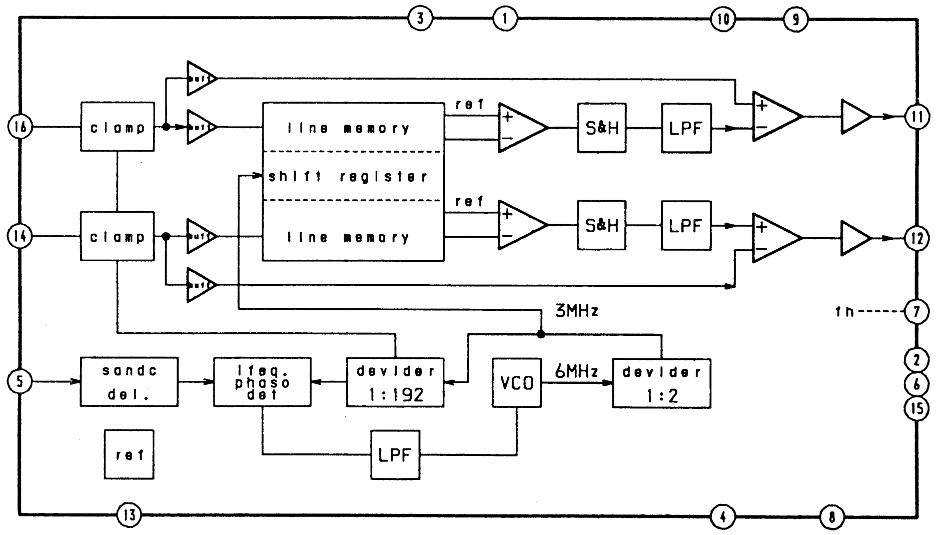
B BOARD IC302 TDA8442-N3


DIGITAL-TO-ANALOGUE CONVERTER DAC0
DIGITAL-TO-ANALOGUE CONVERTER DAC1
DIGITAL-TO-ANALOGUE CONVERTER DAC2
DIGITAL-TO-ANALOGUE CONVERTER DAC3
POWER-DOWN DETECTOR
DACX
POD
I²C BUS SLAVE RECEIVER
OUTPUT PORT P2
OUTPUT PORT P2N
OUTPUT PORT P1

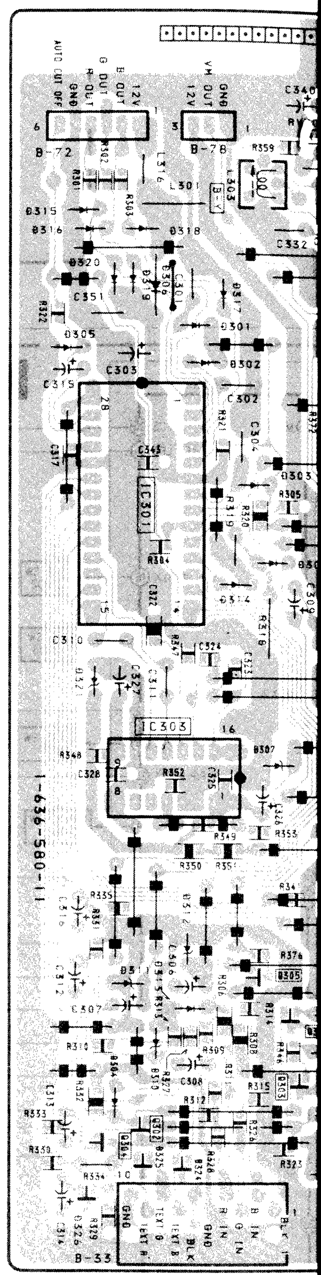
B BOARD IC304 TDA4650


DC FEED 8
ACC
ACC DEMOD
DL AMP DRIVER
BURST BLANK
MATRIX SECAM LIMITER PERMULATOR
SECAM REF
DEMOD
SECAM DEEMPH BLANKING COLOR KILLER
PAL/NTSC
SECAM V/H/V+H
IDENT
SYSTEM CONTROL STANDARD SCANNING
FORCED STANDARD SETTING
HUE NTSC ± 30°
SERVICE
2f osc PAL/NTSC DIVIDER, PLL
PULSE PROCESSING
SAND CASLTE PULSE DETECT

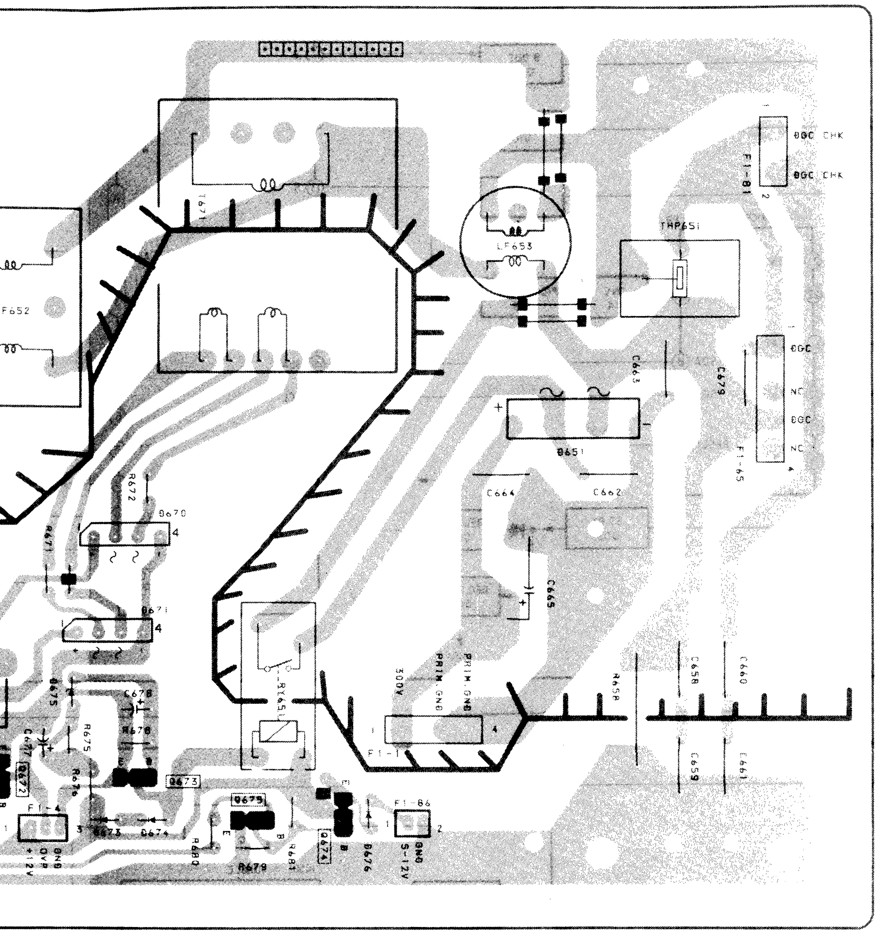
B BOARD IC303 TDA4660

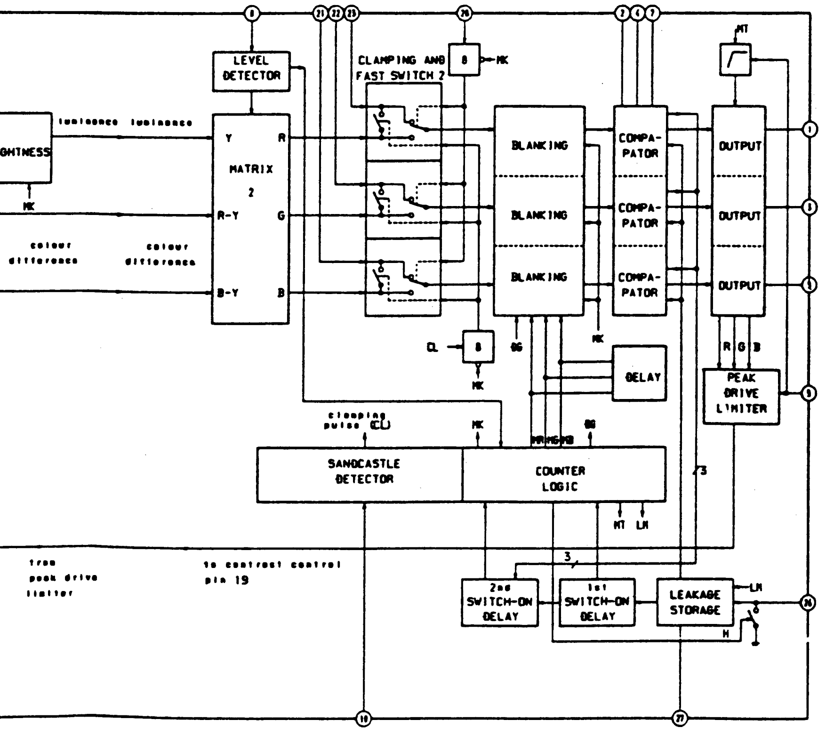

clamp
clamp
line memory
shift register
line memory
ref
ref
S&H
S&H
LPF
LPF
3MHz
fh
sandc del.
ifreq. phase det
devider 1:192
VCO
6MHz
devider 1:2
LPF
ref

–B Board–

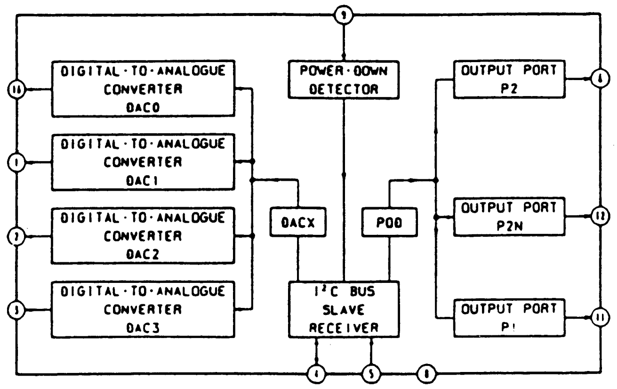

IC301
IC303
1-636-580-11
B-72
B-78
B-33
C303
C332
C340

AC IN, POWER SW] **B** [VIDEO PROCESSOR, Y/C SWITCH COLOR PROCESSOR, SHARPNESS CONTROL]

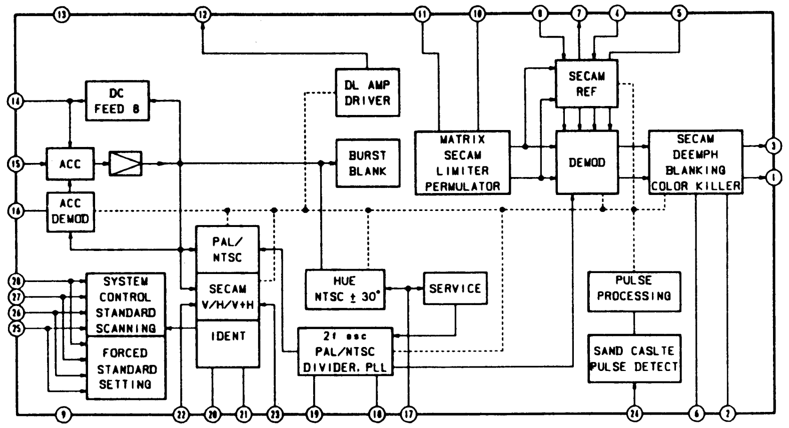

F652
LF653
THP651
D651
C663
C679
C664
C662
C665
R672
D670
R671
D671
R675
R676
D673
D674
D675
R679
R681
R680
D672
F1-81
F1-45
F1-1
F1-86
PRIM GND
500V
S-12V
DDC CHK


⑧
㉑ ㉒ ㉓
㉖
② ④ ⑦
LEVEL DETECTOR
CLAMPING AND FAST SWITCH 2
B
MK
MT
GHTNESS
luminance luminance
Y
R
MATRIX 2
R-Y
G
B-Y
B
colour difference
colour difference
BLANKING
BLANKING
BLANKING
COMPA-PATOR
COMPA-PATOR
COMPA-PATOR
OUTPUT
OUTPUT
OUTPUT
①
③
⑤
⑨
CL
BG
DELAY
R G B
PEAK DRIVE LIMITER
clamping pulse (CL)
MK
BG
MR MG MB
SANDCASTLE DETECTOR
COUNTER LOGIC
3
MT LM
from peak drive limiter
to contrast control pin 19
3
2nd SWITCH-ON DELAY
1st SWITCH-ON DELAY
LEAKAGE STORAGE
LM
H
⑩
㉗
㉖

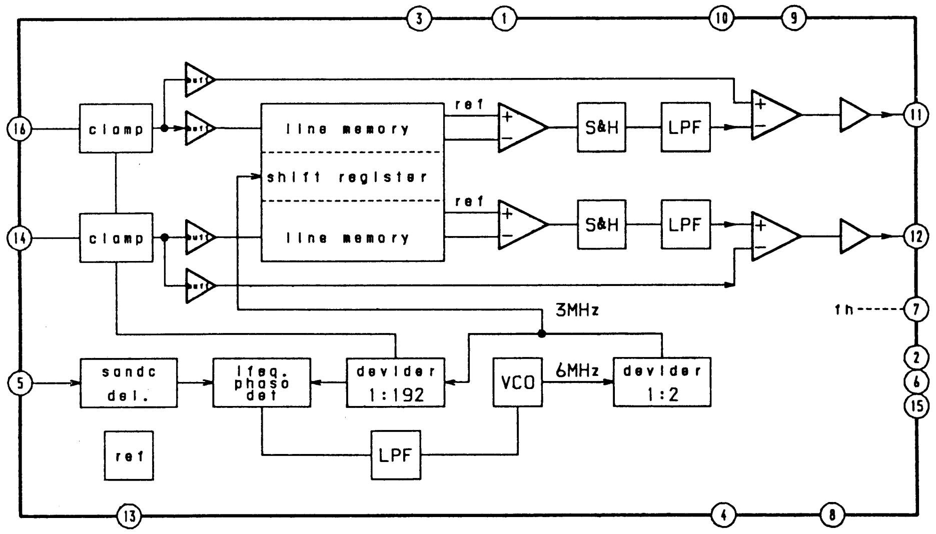
B BOARD IC302 TDA8442-N3


⑨
⑩
①
②
③
DIGITAL-TO-ANALOGUE CONVERTER DAC0
DIGITAL-TO-ANALOGUE CONVERTER DAC1
DIGITAL-TO-ANALOGUE CONVERTER DAC2
DIGITAL-TO-ANALOGUE CONVERTER DAC3
POWER-DOWN DETECTOR
DACX
POD
I²C BUS SLAVE RECEIVER
OUTPUT PORT P2
OUTPUT PORT P2N
OUTPUT PORT P1
⑥
⑫
⑪
④
⑤
⑧

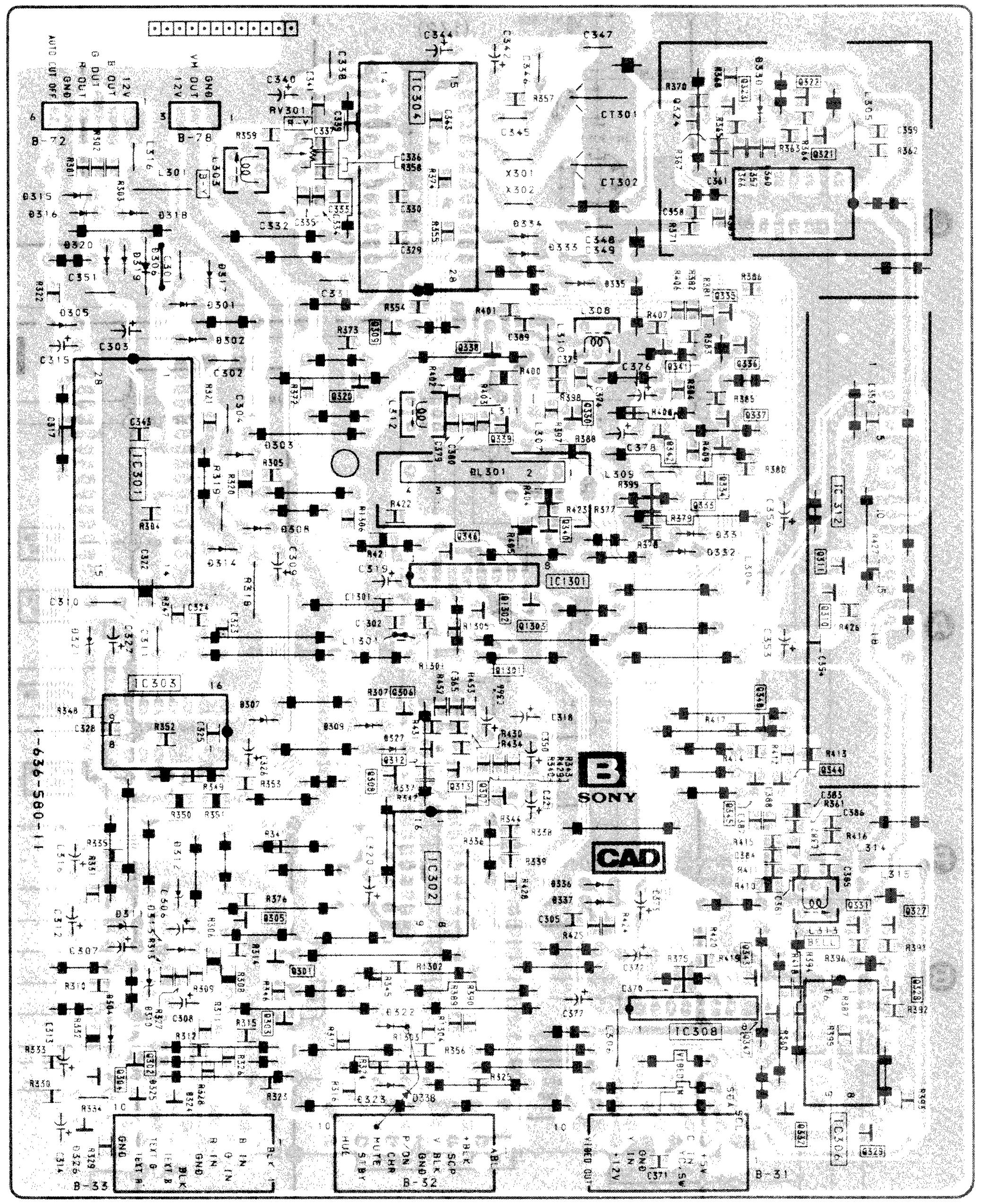
B BOARD IC304 TDA4650

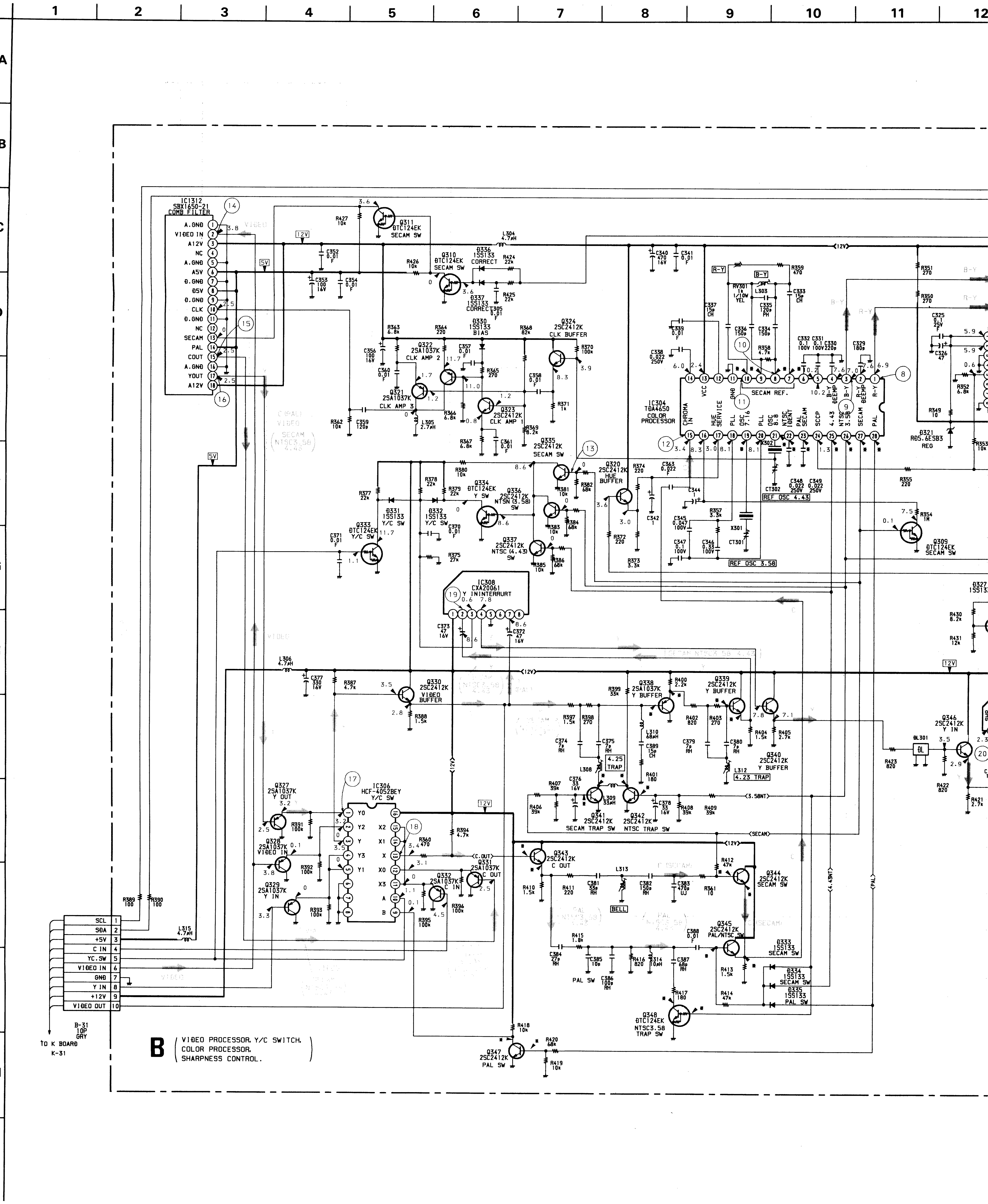

⑬ ⑫ ⑪ ⑩ ⑧ ⑦ ⑥ ⑤
⑭
⑮
⑯
DC FEED B
ACC
ACC DEMOD
DL AMP DRIVER
BURST BLANK
MATRIX SECAM LIMITER PERMULATOR
SECAM REF
DEMOD
SECAM DEEMPH BLANKING COLOR KILLER
③
①
PAL/NTSC
SYSTEM CONTROL STANDARD SCANNING
FORCED STANDARD SETTING
SECAM V/H/V+H
IDENT
HUE NTSC ± 30°
SERVICE
2f osc PAL/NTSC DIVIDER, PLL
PULSE PROCESSING
SAND CASLTE PULSE DETECT
㉘ ㉗ ㉖ ㉕
⑨ ㉒ ⑳ ㉑ ㉓ ⑲ ⑱ ⑰ ㉔ ④ ②

B BOARD IC303 TDA4660

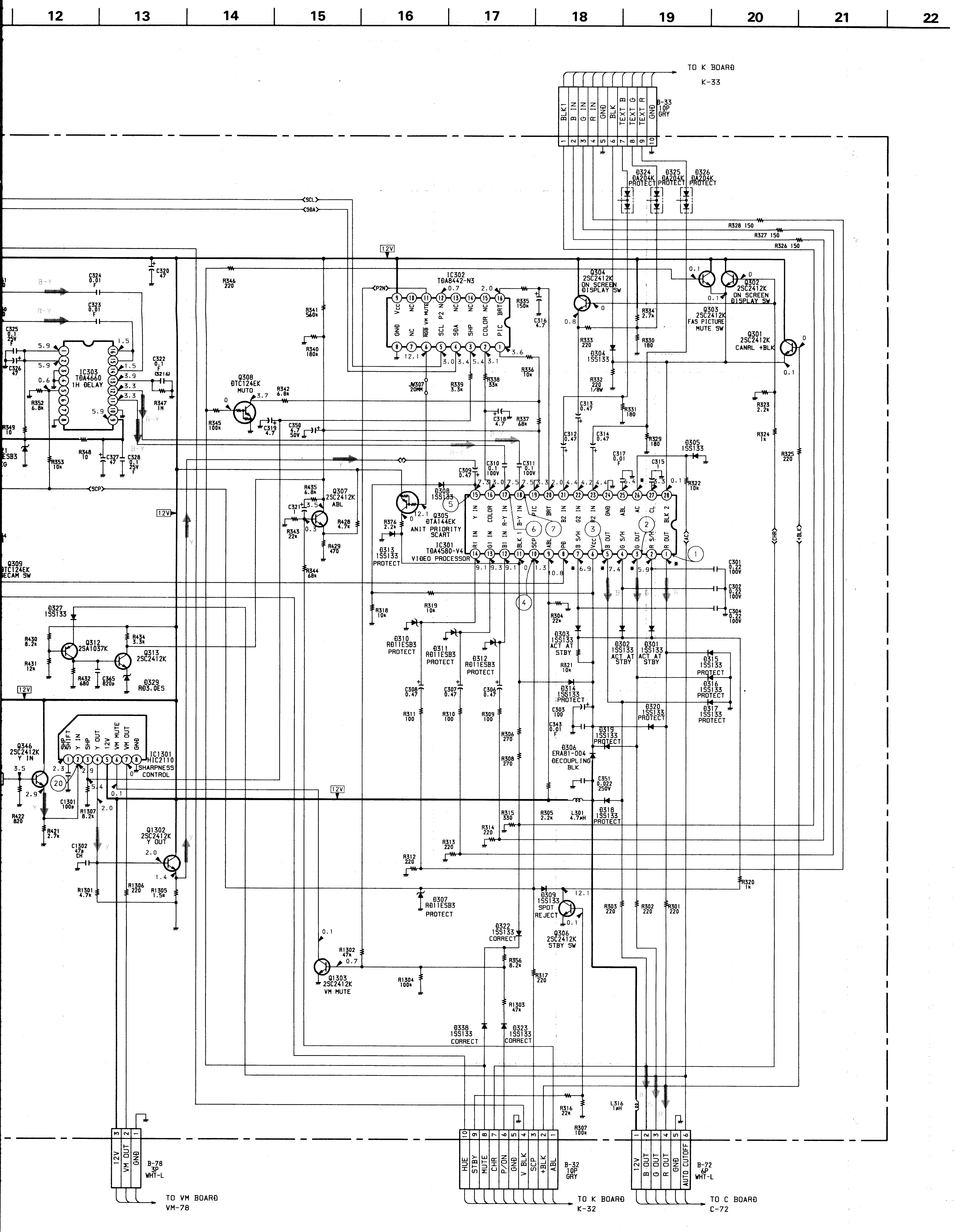

③ ① ⑩ ⑨
⑯
⑭
clamp
clamp
line memory
shift register
line memory
ref
ref
S&H
S&H
LPF
LPF
⑪
⑫
3MHz
fh
⑦
⑤
sandc del.
ifeq. phase det
devider 1:192
VCO
6MHz
devider 1:2
LPF
ref
②
⑥
⑮
⑬ ④ ⑧

–B Board–

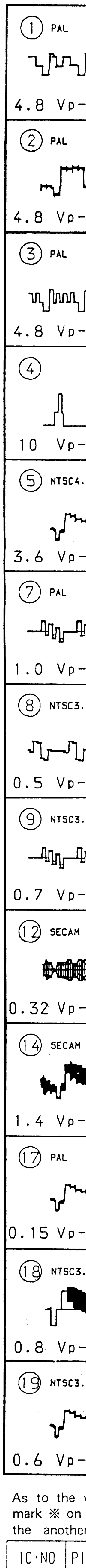

IC301
IC302
IC303
IC304
IC308
IC312
IC1301
BL301
X301
X302
CT301
CT302
L305
L308
RV301
B-72
B-78
B-33
B-32
B-31
B
SONY
CAD
1-636-580-11


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
IC1312 SBX1650-21 COMB FILTER
A.GND
VIDEO IN
A12V
NC
A.GND
A5V
D.GND
D5V
D.GND
CLK
D.GND
NC
SECAM
PAL
COUT
A.GND
YOUT
A12V
Q311 DTC124EK SECAM SW
Q310 DTC124EK SECAM SW
Q336 1SS133 CORRECT
Q337 1SS133 CORRECT
Q330 1SS133 BIAS
Q324 2SC2412K CLK BUFFER
Q322 2SA1037K CLK AMP 2
Q321 2SA1037K CLK AMP 3
Q323 2SC2412K CLK AMP 1
Q335 2SC2412K SECAM SW
Q320 2SC2412K HUE BUFFER
Q331 1SS133 Y/C SW
Q332 1SS133 Y/C SW
Q333 DTC124EK Y/C SW
Q334 DTC124EK Y SW
Q336 2SC2412K NTSN (3.58) SW
Q337 2SC2412K NTSC (4.43) SW
IC304 TDA4650 COLOR PROCESSOR
CHROMA IN
VCC
GND
SECAM REF.
HUE SERVICE
PLL
OSC 7.16
PLL
OSC 8.8
NTSC IDENT
PAL SECAM
SCCP
4.43
NTSC 3.58
SECAM
PAL
B-Y DEEMP
R-Y DEEMP
B-Y
R-Y
REF OSC 4.43
REF OSC 3.58
Q321 RD5.6ESB3 REG
Q309 DTC124EK SECAM SW
IC308 CXA20061 Y ININTERRURT
Q330 2SC2412K VIDEO BUFFER
Q338 2SA1037K Y BUFFER
Q339 2SC2412K Y BUFFER
Q340 2SC2412K Y BUFFER
Q346 2SC2412K Y IN
4.25 TRAP
4.23 TRAP
Q341 2SC2412K SECAM TRAP SW
Q342 2SC2412K NTSC TRAP SW
IC306 HCF-4052BEY Y/C SW
Q327 2SA1037K Y OUT
Q328 2SA1037K VIDEO IN
Q329 2SA1037K Y IN
Q332 2SA1037K C IN
Q331 2SA1037K C OUT
Q343 2SC2412K C OUT
Q344 2SC2412K SECAM SW
Q345 2SC2412K PAL/NTSC SW
Q333 1SS133 SECAM SW
Q334 1SS133 SECAM SW
Q335 1SS133 PAL SW
Q348 DTC124EK NTSC3.58 TRAP SW
Q347 2SC2412K PAL SW
BELL
PAL SW
SCL
SDA
+5V
C IN
YC.SW
VIDEO IN
GND
Y IN
+12V
VIDEO OUT
B-31 10P GRY
TO K BOARD K-31

B (VIDEO PROCESSOR, Y/C SWITCH, COLOR PROCESSOR, SHARPNESS CONTROL.)

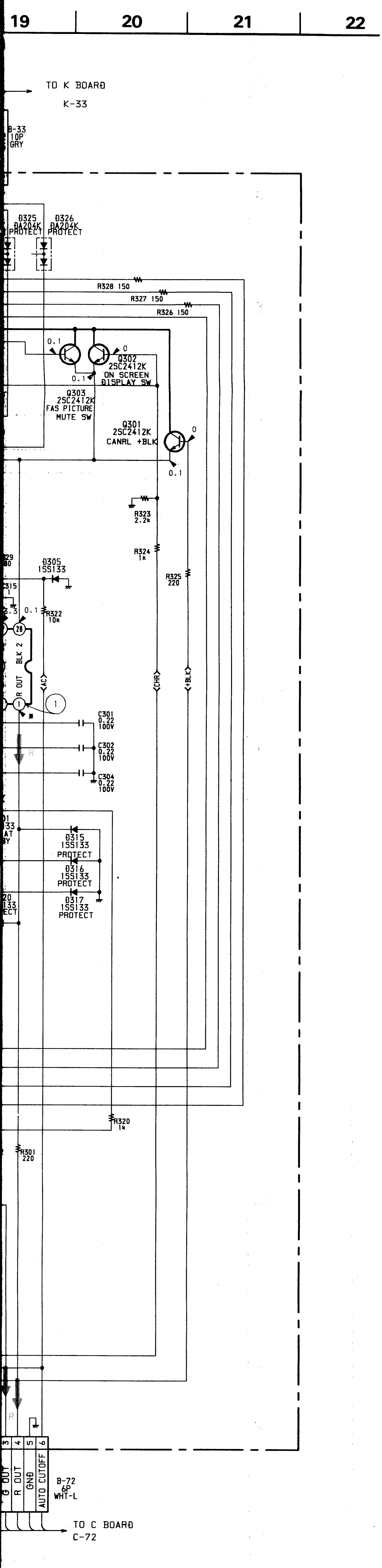

12
13
14
15
16
17
18
19
20
21
22
TO K BOARD
K-33
B-33
10P
GRY
BLK1
B IN
G IN
R IN
GND
BLK
TEXT B
TEXT G
TEXT R
GND
D324
DA204K
PROTECT
D325
DA204K
PROTECT
D326
DA204K
PROTECT
R328 150
R327 150
R326 150
<SCL>
<SDA>
12V
IC302
TDA8442-N3
<P2N>
Vcc
NC
RGB VM MUTE
SCL
P2 NC
SDA
NC
SHP
COLOR NC
PIC
BRT
R335 150k
C316 4.7
R341 560k
R340 180k
R346 220
C324 0.01 F
C323 0.01 F
B-Y
R-Y
C320 47
C325 0.1 25V F
C326 47
IC303
TDA4660
1H DELAY
C322 0.1 F
R352 6.8k
R347 1M
Q308
DTC124EK
MUTO
R342 6.8k
R345 100k
C319 4.7
C350 4.7 50V
JW307 20MM
R339 3.3k
R338 33k
R336 10k
C318 4.7
R337 68k
Q304
2SC2412K
ON SCREEN
DISPLAY SW
R334 2.7k
R333 220
R330 180
D304
1SS133
R332 220 1/8W
R331 180
C313 0.47
C312 0.47
C314 0.47
R329 180
Q302
2SC2412K
ON SCREEN
DISPLAY SW
Q303
2SC2412K
FAS PICTURE
MUTE SW
Q301
2SC2412K
CANRL +BLK
R323 2.2k
R324 1k
R325 220
D305
1SS133
C317 0.01 F
C315
R322 10k
<CHR>
<BLK>
<AC>
R349 10
R348 10
R353 10k
C327 47
C328 0.1 25V F
<SCP>
12V
C310 0.1 100V
C311 0.1 100V
C309 0.47
R435 6.8k
Q307
2SC2412K
ABL
C321
R343 22k
R428 4.7k
R429 470
R344 68k
D308
1SS133
Q305
DTA144EK
ANIT PRIORITY
SCART
R376 2.2k
D313
1SS133
PROTECT
IC301
TDA4580-V4
VIDEO PROCESSOR
Y IN
COLOR
R-Y IN
B-Y IN
PIC
BRT
B2 IN
G2 IN
R2 IN
GND
ABL
AC
CL
BLK 2
R1 IN
G1 IN
B1 IN
BLK 1
SCP
ABL
PD
B S/H
Vcc
B OUT
G S/H
G OUT
R S/H
R OUT
C301 0.22 100V
C302 0.22 100V
C304 0.22 100V
Q309
DTC124EK
SECAM SW
D327
1SS133
R430 8.2k
Q312
2SA1037K
R434 3.3k
Q313
2SC2412K
R431 12k
R432 680
C365 820p
D329
RD3.0ES
R318 10k
R319 10k
D310
RD11ESB3
PROTECT
D311
RD11ESB3
PROTECT
D312
RD11ESB3
PROTECT
R304 22k
D303
1SS133
ACT AT
STBY
R321 10k
D302
1SS133
ACT AT
STBY
D301
1SS133
ACT AT
STBY
D315
1SS133
PROTECT
D316
1SS133
PROTECT
D317
1SS133
PROTECT
C308 0.47
C307 0.47
C306 0.47
R311 100
R310 100
R309 100
D314
1SS133
PROTECT
C303 100
C343 0.01 F
D320
1SS133
PROTECT
D319
1SS133
PROTECT
R306 270
R308 270
D306
ERA81-004
DECOUPLING
BLK
C351 0.022 250V
L301 4.7μH
D318
1SS133
PROTECT
R315 330
R305 2.2k
Q346
2SC2412K
Y IN
R422 820
R421 2.7k
IC1301
HIC2110
SHARPNESS
CONTROL
SHP SHIFT
Y IN
SHP
Y OUT
12V
VM MUTE
VM OUT
GND
C1301 100p
R1307 8.2k
12V
C1302 47p CH
Q1302
2SC2412K
Y OUT
R1301 4.7k
R1306 220
R1305 1.5k
R314 220
R313 220
R312 220
D307
RD11ESB3
PROTECT
D309
1SS133
SPOT
REJECT
Q306
2SC2412K
STBY SW
R303 220
R302 220
R301 220
R320 1k
D322
1SS133
CORRECT
R1302 47k
Q1303
2SC2412K
VM MUTE
R1304 100k
R356 8.2k
R317 220
R1303 47k
D338
1SS133
CORRECT
D323
1SS133
CORRECT
R316 22k
R307 100k
L316 1μH
12V
VM OUT
GND
B-78
3P
WHT-L
TO VM BOARD
VM-78
HUE
STBY
MUTE
CHR
P/ON
GND
V BLK
SCP
+BLK
ABL
B-32
10P
GRY
TO K BOARD
K-32
12V
B OUT
G OUT
R OUT
GND
AUTO CUTOFF
B-72
6P
WHT-L
TO C BOARD
C-72

• WAVEFO

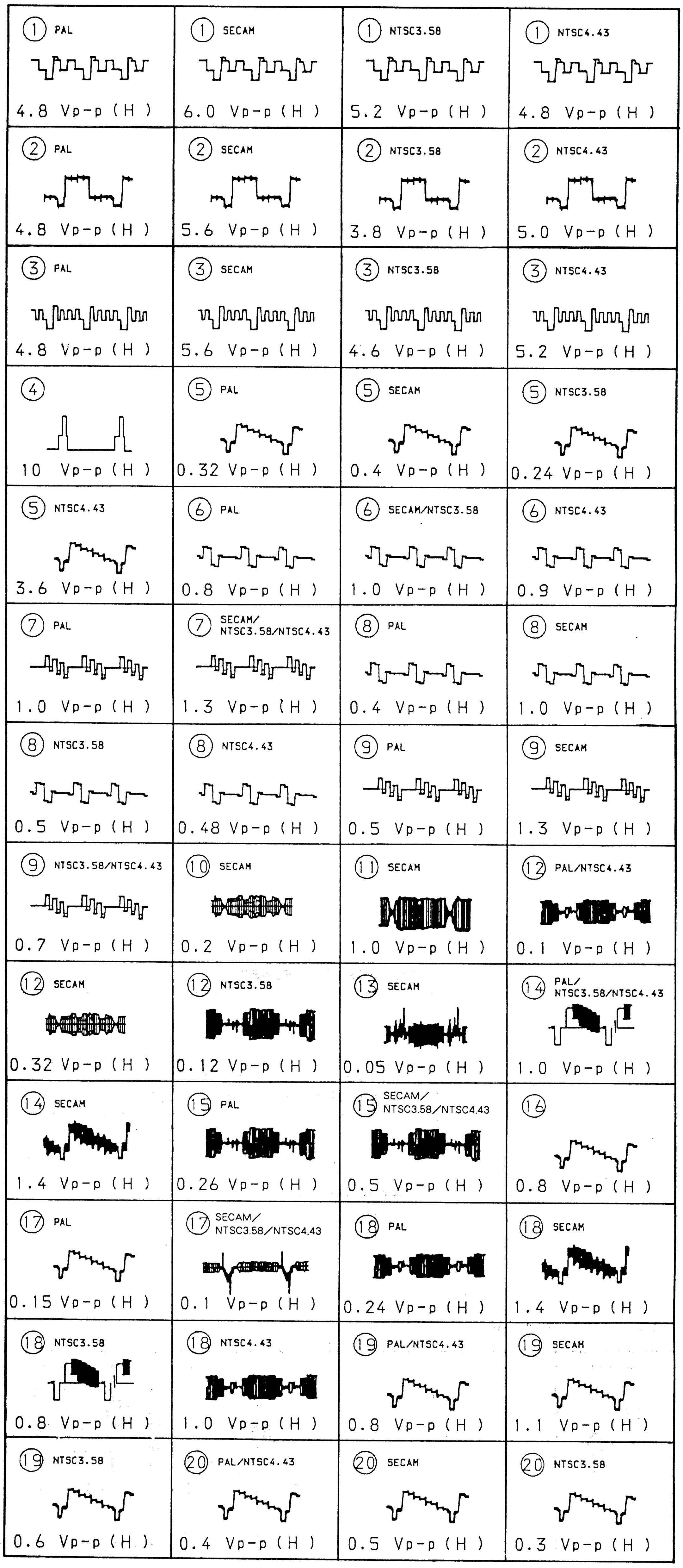


As to the
mark ※ on
the another

IC·NO	PI
IC301	
IC304	


19
20
21
22
TO K BOARD
K-33
B-33
10P
GRY
Q325
DA204K
PROTECT
Q326
DA204K
PROTECT
R328 150
R327 150
R326 150
Q302
2SC2412K
ON SCREEN
DISPLAY SW
Q303
2SC2412K
FAS PICTURE
MUTE SW
Q301
2SC2412K
CANRL +BLK
R323
2.2k
R324
1k
R325
220
Q305
1SS133
R322
10k
BLK 2
R OUT
<AC>
<CHR>
<+BLK>
C301
0.22
100V
C302
0.22
100V
C304
0.22
100V
Q315
1SS133
PROTECT
Q316
1SS133
PROTECT
Q317
1SS133
PROTECT
R320
1k
R301
220
G OUT
R OUT
GND
AUTO CUTOFF
B-72
6P
WHT-L
TO C BOARD
C-72

• WAVEFORMS B BOARD



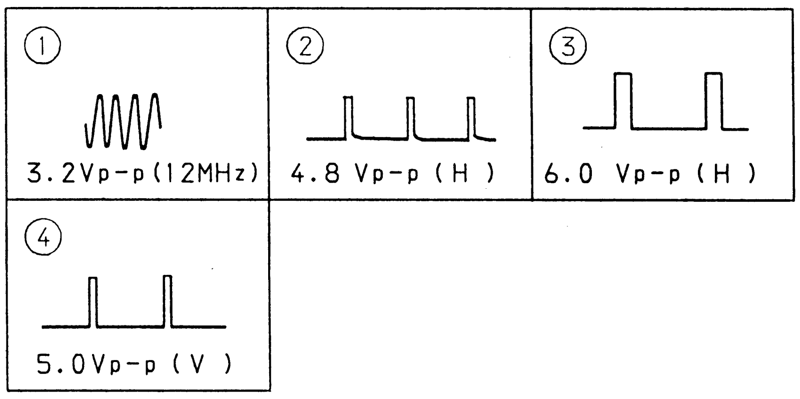
① PAL 4.8 Vp-p (H)	① SECAM 6.0 Vp-p (H)	① NTSC3.58 5.2 Vp-p (H)	① NTSC4.43 4.8 Vp-p (H)
② PAL 4.8 Vp-p (H)	② SECAM 5.6 Vp-p (H)	② NTSC3.58 3.8 Vp-p (H)	② NTSC4.43 5.0 Vp-p (H)
③ PAL 4.8 Vp-p (H)	③ SECAM 5.6 Vp-p (H)	③ NTSC3.58 4.6 Vp-p (H)	③ NTSC4.43 5.2 Vp-p (H)
④ 10 Vp-p (H)	⑤ PAL 0.32 Vp-p (H)	⑤ SECAM 0.4 Vp-p (H)	⑤ NTSC3.58 0.24 Vp-p (H)
⑤ NTSC4.43 3.6 Vp-p (H)	⑥ PAL 0.8 Vp-p (H)	⑥ SECAM/NTSC3.58 1.0 Vp-p (H)	⑥ NTSC4.43 0.9 Vp-p (H)
⑦ PAL 1.0 Vp-p (H)	⑦ SECAM/ NTSC3.58/NTSC4.43 1.3 Vp-p (H)	⑧ PAL 0.4 Vp-p (H)	⑧ SECAM 1.0 Vp-p (H)
⑧ NTSC3.58 0.5 Vp-p (H)	⑧ NTSC4.43 0.48 Vp-p (H)	⑨ PAL 0.5 Vp-p (H)	⑨ SECAM 1.3 Vp-p (H)
⑨ NTSC3.58/NTSC4.43 0.7 Vp-p (H)	⑩ SECAM 0.2 Vp-p (H)	⑪ SECAM 1.0 Vp-p (H)	⑫ PAL/NTSC4.43 0.1 Vp-p (H)
⑫ SECAM 0.32 Vp-p (H)	⑫ NTSC3.58 0.12 Vp-p (H)	⑬ SECAM 0.05 Vp-p (H)	⑭ PAL/ NTSC3.58/NTSC4.43 1.0 Vp-p (H)
⑭ SECAM 1.4 Vp-p (H)	⑮ PAL 0.26 Vp-p (H)	⑮ SECAM/ NTSC3.58/NTSC4.43 0.5 Vp-p (H)	⑯ 0.8 Vp-p (H)
⑰ PAL 0.15 Vp-p (H)	⑰ SECAM/ NTSC3.58/NTSC4.43 0.1 Vp-p (H)	⑱ PAL 0.24 Vp-p (H)	⑱ SECAM 1.4 Vp-p (H)
⑱ NTSC3.58 0.8 Vp-p (H)	⑱ NTSC4.43 1.0 Vp-p (H)	⑲ PAL/NTSC4.43 0.8 Vp-p (H)	⑲ SECAM 1.1 Vp-p (H)
⑲ NTSC3.58 0.6 Vp-p (H)	⑳ PAL/NTSC4.43 0.4 Vp-p (H)	⑳ SECAM 0.5 Vp-p (H)	⑳ NTSC3.58 0.3 Vp-p (H)

As to the voltage volue shown by the mark ※ on the Schematic Diagram, see the another list.

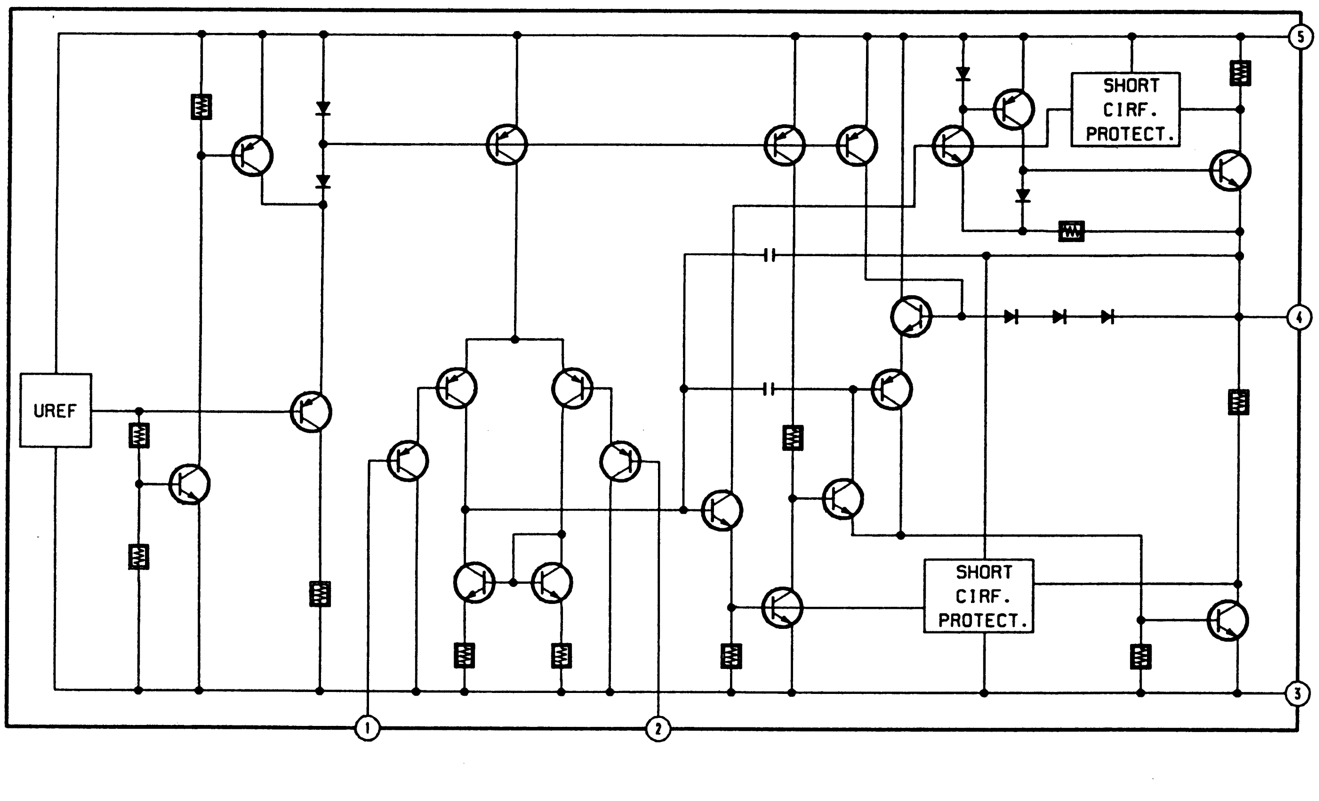
IC·NO	PIN·NO	PAL	SECAM	NTSC 3.38	NTSC 4.43
IC301	①	3.7	4.1	3.3	3.7
	③	5.4	5.7	5.0	5.4
	⑤	5.5	5.8	5.1	5.5
	⑧	0.1	0.1	6.0	0.1
	㉖	6.0	6.5	5.5	4.0
IC304	⑦	4.9	3.5	4.9	4.9
	⑧	3.6	3.1	3.9	3.6
	⑨	3.6	3.1	3.9	3.6
	⑩	4.9	4.5	4.9	4.9
	⑲	3.0	3.8	3.0	3.0
	㉑	3.0	4.0	3.3	3.0
	㉒	5.8	5.8	7.4	3.0
	㉓	7.4	7.0	5.7	5.7
	㉕	0.1	0.1	0.1	6.0
	㉖	0.1	0.1	6.0	0.1
	㉗	0.1	6.0	0.1	0.1
	㉘	6.0	0.1	0.1	0.1

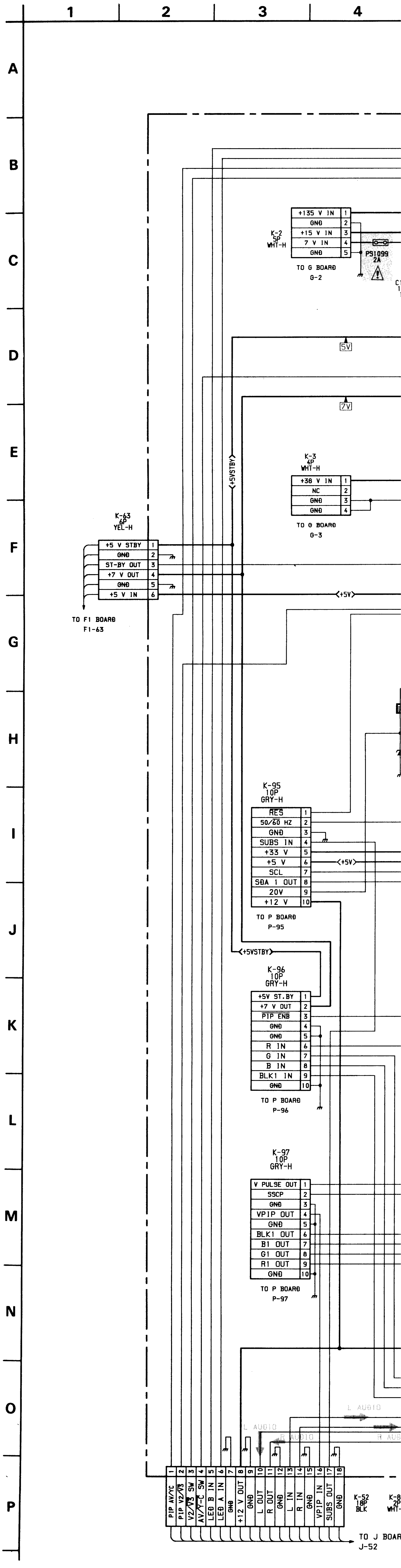
Q·NO		PAL	SECAM	NTSC 3.38	NTSC 4.43
Q338	B	2.9	4.1	4.0	4.0
	E	3.5	4.7	4.7	4.7
Q339	B	3.5	4.7	4.7	4.7
	E	2.9	4.1	4.0	4.0
Q341	B	0	0.7	0	0
	C	12.1	0	0	12.1
Q342	B	0	0	0.7	0
	C	12.1	0	0	12.1
Q343	B	3.4	5.4	5.3	5.3
	E	2.8	4.7	4.7	4.7
Q344	B	0.1	5.4	0.1	0.1
	E	4.4	4.7	4.4	4.4
Q345	B	5.1	0.1	5.1	5.1
	E	4.4	4.7	4.4	4.4
Q347	B	0.6	0	0	0
	C	0.1	12.1	12.2	12.2
Q348	B	0.1	0.1	6.0	0.1
	C	0.6	0.6	0	0.6

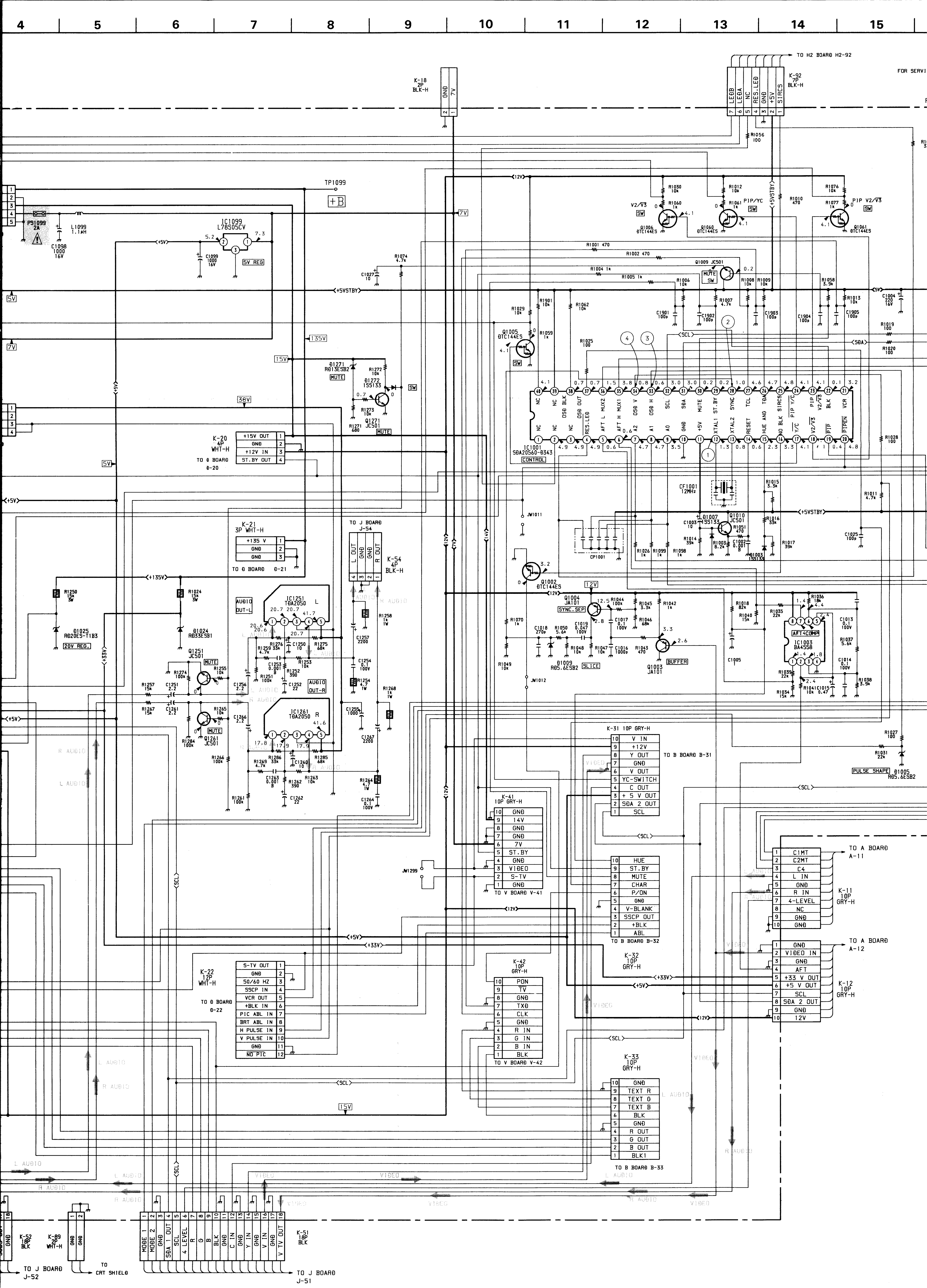
• WAVEFORMS K BOARD

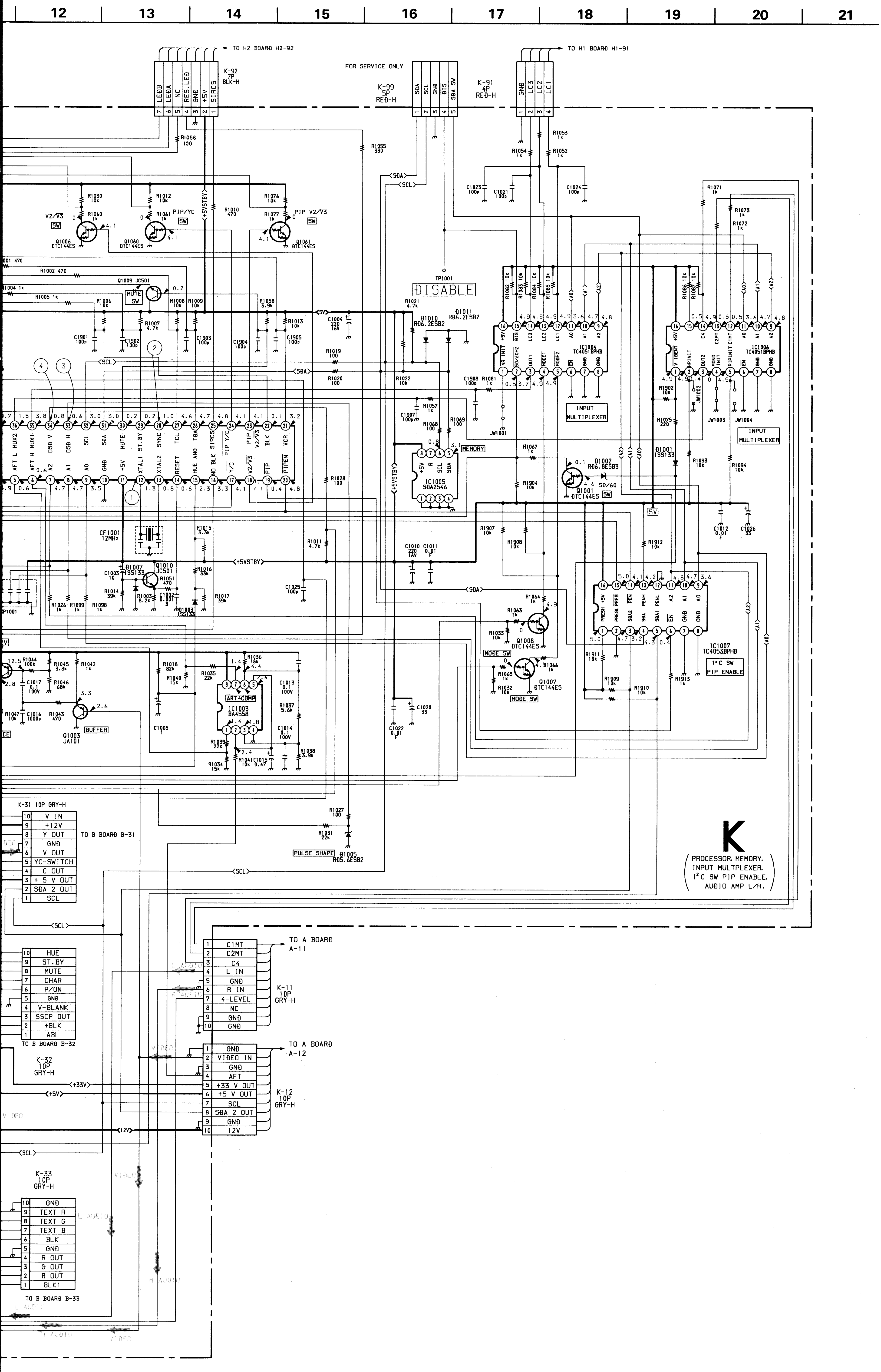


K BOARD IC1251／1261 TDA2050


UREF
SHORT CIRF. PROTECT.
SHORT CIRF. PROTECT.
⑤
④
③
①
②

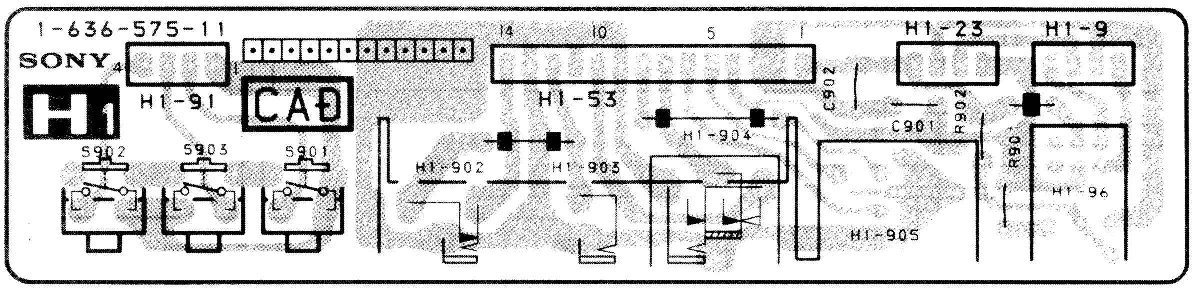

1
2
3
4
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
K-2
5P
WHT-H
+135 V IN 1
GND 2
+15 V IN 3
7 V IN 4
GND 5
TO G BOARD
G-2
PS1099
2A
5V
7V
K-3
4P
WHT-H
+38 V IN 1
NC 2
GND 3
GND 4
TO G BOARD
G-3
<+5VSTBY>
K-63
6P
YEL-H
+5 V STBY 1
GND 2
ST-BY OUT 3
+7 V OUT 4
GND 5
+5 V IN 6
TO F1 BOARD
F1-63
<+5V>
K-95
10P
GRY-H
RES 1
50/60 HZ 2
GND 3
SUBS IN 4
+33 V 5
+5 V 6
SCL 7
SDA 1 OUT 8
20V 9
+12 V 10
TO P BOARD
P-95
<+5V>
<+5VSTBY>
K-96
10P
GRY-H
+5V ST.BY 1
+7 V OUT 2
PIP ENB 3
GND 4
GND 5
R IN 6
G IN 7
B IN 8
BLK1 IN 9
GND 10
TO P BOARD
P-96
K-97
10P
GRY-H
V PULSE OUT 1
SSCP 2
GND 3
VPIP OUT 4
GND 5
BLK1 OUT 6
B1 OUT 7
G1 OUT 8
R1 OUT 9
GND 10
TO P BOARD
P-97
L AU610
R AU610
1 PIP AV/YC
2 PIP V2/V3
3 V2/V3 SW
4 AV/Y-C SW
5 LED B IN
6 LED A IN
7 GND
8 +12 V OUT
9 GND
10 L OUT
11 R OUT
12 GND
13 L IN
14 R IN
15 GND
16 VPIP IN
17 SUBS OUT
18 GND
K-52
18P
BLK
TO J BOARD
J-52


4
5
6
7
8
9
10
11
12
13
14
15
TO H2 BOARD H2-92
FOR SERVI
K-18 2P BLK-H
GND
7V
K-92 7P BLK-H
LEDB
LEDA
NC
RES.LED
GND
+5V
SIRCS
R1056 100
TP1099
+B
PS1099 2A
L1099 1.1μH
C1098 1000 16V
IC1099 L78S05CV
5V REG
C1099 1000 16V
R1074 4.7k
C1027 10
135V
15V
38V
D1271 RD13ESB2
MUTE
R1272 10k
D1272 1SS133
Q1271 JC501
R1273 10k
R1271 680
SW
K-20 4P WHT-H
+15V OUT
GND
+12V IN
ST.BY OUT
TO D BOARD D-20
K-21 3P WHT-H
+135 V
GND
TO D BOARD D-21
TO J BOARD J-54
L OUT
R OUT
K-54 4P BLK-H
R1250 15k 5W
D1025 RD20ES-T1B3
20V REG.
R1024 15k 5W
D1024 RD33ESB1
Q1251 JC501
Q1261 JC501
AUDIO OUT-L
AUDIO OUT-R
IC1251 TDA2050 L
IC1261 TDA2050 R
R1258 1k 1W
R1268 1k 1W
C1257 2200
C1267 2200
C1255 1000
R1254 4.7 1W
R1264 4.7 1W
C1254 0.1 100V
C1264 0.1 100V
R1030 10k
R1060 1k
Q1006 DTC144ES
V2/V3
R1012 10k
R1061 1k
PIP/YC
Q1060 DTC144ES
R1010 470
R1076 10k
R1077 1k
PIP V2/V3
Q1061 DTC144ES
R1001 470
R1002 470
R1004 1k
R1005 1k
Q1009 JC501
R1006 10k
R1007 4.7k
R1008 10k
R1009 10k
R1058 3.9k
R1013 10k
C1004 220 16V
Q1005 DTC144ES
R1029 10k
R1901 10k
R1059 1k
R1062 10k
R1025 100
C1901 100p
C1902 100p
C1903 100p
C1904 100p
C1905 100p
R1019 100
R1020 100
SDA
SCL
+5VSTBY
IC1001 SDA20560-0343
CONTROL
NC
OSD BLK
OSD OUT
AFT L MUX2
AFT H MUX1
OSD V
OSD H
SCL
SDA
MUTE
ST.BY
SYNC
TCL
HUE ANG
TDA
SIRCS
PIP Y/C
PIP V2/V3
BLK
VCR
RES.LED
A2
A1
A0
GND
+5V
XTAL1
XTAL2
RESET
NO BLK
Y/C
V2/V3
PIP
PIPEN
R1028 100
CF1001 12MHz
R1015 3.3k
R1011 4.7k
JW1011
D1007 1SS133
Q1010 JC501
R1051 470
R1016 33k
C1003 10
R1014 39k
R1003 8.2k
C1002 0.001
D1003 1SS133
CP1001
R1026 1k
R1099 1k
R1098 1k
R1017 39k
C1025 100p
Q1002 DTC144ES
12V
Q1004 JA101
SYNC.SEP
R1044 100k
R1045 3.3k
R1042 1k
R1046 68k
C1017 0.1 100V
Q1003 JA101
BUFFER
R1043 470
R1070 1k
C1018 270p
R1050 5.6k
C1019 0.047 100V
R1048 10k
R1047 1k
C1016 1000p
D1009 RD5.6ESB2
SLICE
R1049 10k
JW1012
R1018 82k
R1040 15k
C1005 1
R1035 22k
R1036 18k
IC1003 BA4558
AFT COMP
C1013 0.1 100V
R1037 5.6k
C1014 0.1 100V
R1039 22k
R1034 15k
R1041 10k
C1015 0.47
R1038 3.9k
R1027 100
R1031 22k
PULSE SHAPE
D1005 RD5.6ESB2
K-31 10P GRY-H
V IN
+12V
Y OUT
V OUT
YC-SWITCH
C OUT
+ 5 V OUT
SDA 2 OUT
TO B BOARD B-31
K-41 10P GRY-H
14V
7V
ST.BY
VIDEO
S-TV
TO V BOARD V-41
JW1299
HUE
CHAR
P/ON
V-BLANK
SSCP OUT
+BLK
ABL
TO B BOARD B-32
K-32 10P GRY-H
C1MT
C2MT
C4
L IN
R IN
4-LEVEL
TO A BOARD A-11
K-11 10P GRY-H
VIDEO IN
AFT
+33 V OUT
+5 V OUT
TO A BOARD A-12
K-12 10P GRY-H
K-22 12P WHT-H
S-TV OUT
50/60 HZ
SSCP IN
VCR OUT
+BLK IN
PIC ABL IN
BRT ABL IN
H PULSE IN
V PULSE IN
NO PIC
TO D BOARD D-22
K-42 10P GRY-H
PON
TV
TXD
CLK
G IN
B IN
TO V BOARD V-42
K-33 10P GRY-H
TEXT R
TEXT G
TEXT B
R OUT
G OUT
B OUT
BLK1
TO B BOARD B-33
L AUDIO
R AUDIO
VIDEO
K-52 18P BLK
TO J BOARD J-52
K-89 2P WHT-H
TO CRT SHIELD
MODE 1
MODE 2
SDA 1 OUT
SCL
4 LEVEL
R
G
B
C IN
Y IN
V IN
V TV OUT
K-51 18P BLK
TO J BOARD J-51
+5V
+33V
+135V
+12V

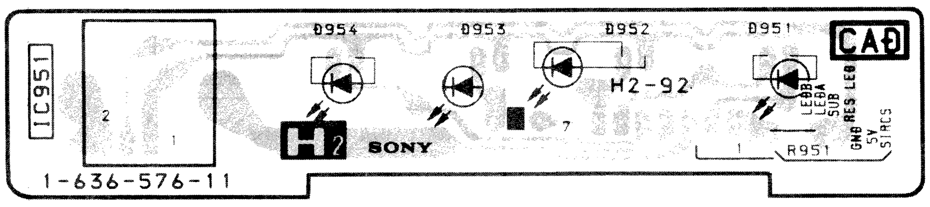
12
13
14
15
16
17
18
19
20
21
TO H2 BOARD H2-92
K-92 7P BLK-H
LEDB
LEDA
NC
RES.LED
GND
+5V
SIRCS
FOR SERVICE ONLY
K-99 5P RED-H
SDA
SCL
GND
DIS
SDA SW
K-91 4P RED-H
TO H1 BOARD H1-91
GND
LC3
LC2
LC1
TP1001
DISABLE
IC1004 TC4051BPHB
INPUT MULTIPLEXER
IC1006 TC4051BPHB
INPUT MULTIPLEXER
IC1005 S0A2546
MEMORY
IC1007 TC4053BPHB
I²C SW PIP ENABLE
IC1003 BA4558
AFT4COMP
Q1003 JA101
BUFFER
Q1008 DTC144ES
MODE SW
Q1007 DTC144ES
Q1001 DTC144ES
50/60
Q1006 DTC144ES
Q1060 DTC144ES
Q1061 DTC144ES
V2/V3
PIP/YC
PIP V2/V3
Q1009 JC501
MUTE SW
CF1001 12MHz
Q1010 JC501
D1005 RD5.6ESB2
PULSE SHAPE
K-31 10P GRY-H
V IN
+12V
Y OUT
GND
V OUT
YC-SWITCH
C OUT
+5 V OUT
SDA 2 OUT
SCL
TO B BOARD B-31
HUE
ST.BY
MUTE
CHAR
P/ON
GND
V-BLANK
SSCP OUT
+BLK
ABL
TO B BOARD B-32
K-32 10P GRY-H
K-11 10P GRY-H
TO A BOARD A-11
C1MT
C2MT
C4
L IN
GND
R IN
4-LEVEL
NC
GND
GND
K-12 10P GRY-H
TO A BOARD A-12
GND
VIDEO IN
GND
AFT
+33 V OUT
+5 V OUT
SCL
SDA 2 OUT
GND
12V
K-33 10P GRY-H
GND
TEXT R
TEXT G
TEXT B
BLK
GND
R OUT
G OUT
B OUT
BLK1
TO B BOARD B-33
L AUDIO
R AUDIO
VIDEO
K
PROCESSOR, MEMORY,
INPUT MULTPLEXER,
I²C SW PIP ENABLE,
AUDIO AMP L/R.

H1 [CONTROL SW, AUDIO/VIDEO IN] **H2** [SIRCS RECEIVER, INDICATOR] **K** [PROCESSOR, MEMORY, INPUT MULTPLEXER, I²C SW, PIP ENABLE, AUDIO AMP L/R] **A** [TUNER, SIF, VIF]

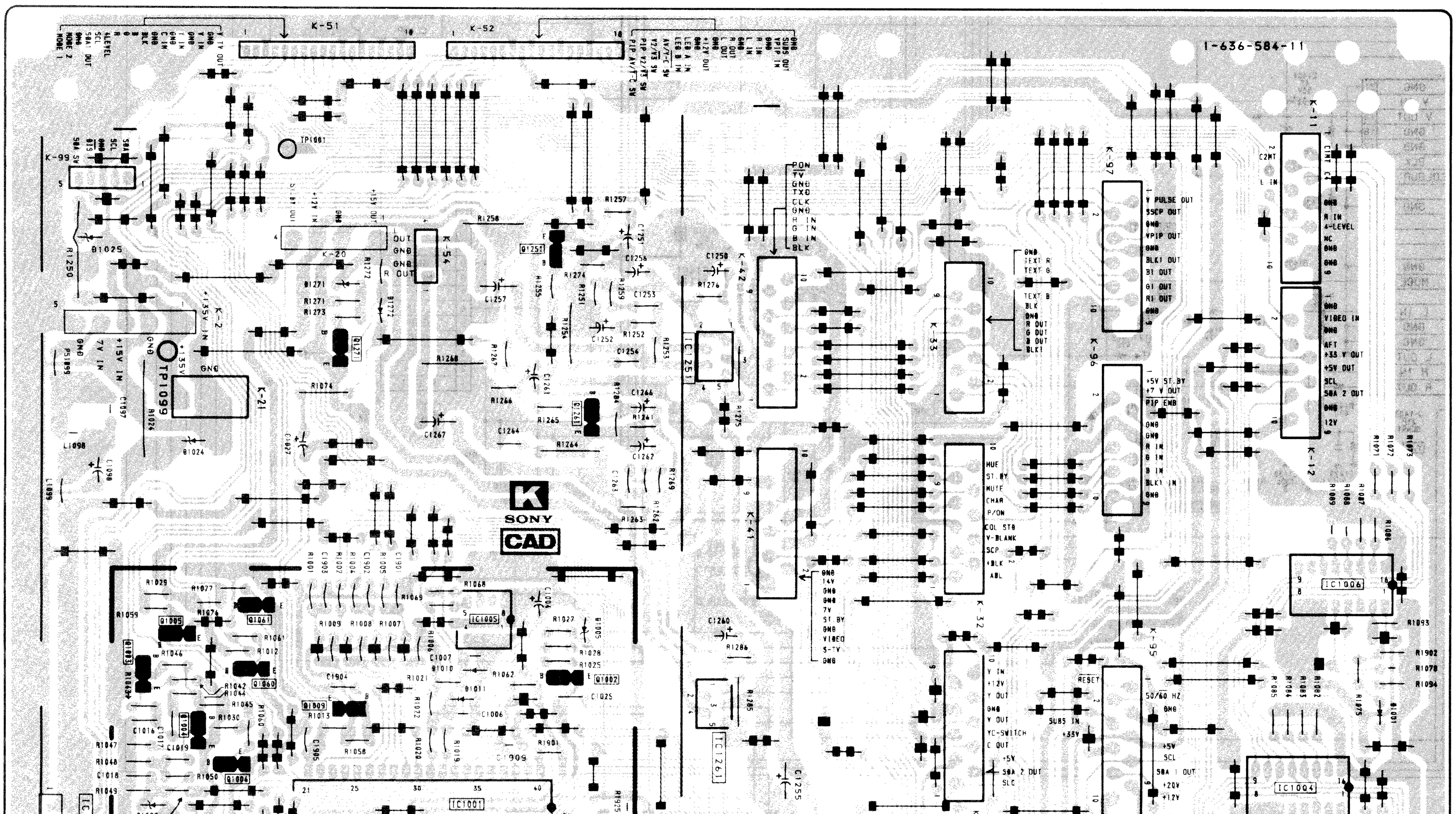
–H1 Board–

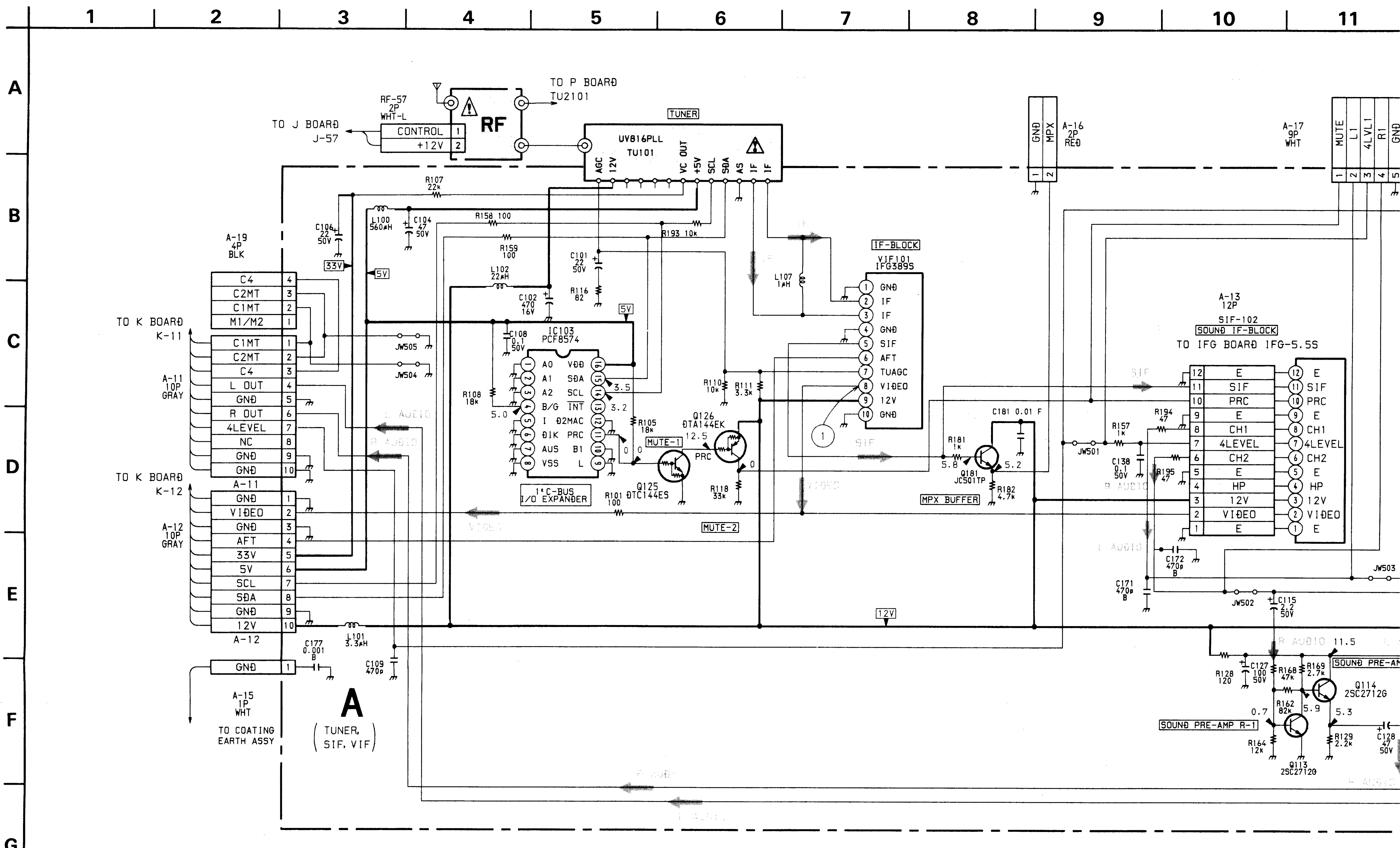

1-636-575-11
SONY
H1
CAD
H1-91
H1-53
H1-23
H1-9
S902
S903
S901
H1-902
H1-903
H1-904
H1-905
H1-96
C902
C901
R902
R901

–H2 Board–

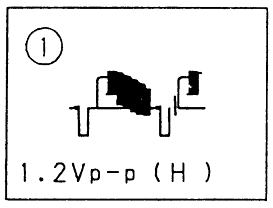

IC951
D954
D953
D952
D951
CAD
H2-92
H2
SONY
R951
1-636-576-11
LEDA
LEDB
SUB
RES LED
GND
5V
SIRCS

–K Board–

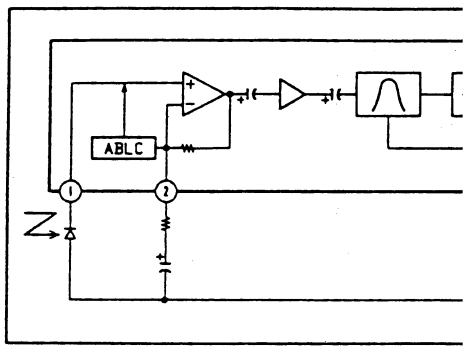

1-636-584-11
K-51
K-52
K-99
K-20
K-54
K-2
K-21
K-42
K-53
K-97
K-96
K-11
K-12
K-41
K-32
K-95
K-31
K-3
K-18
K-92
K-63
K-22
K-91
K-89
IC1251
IC1261
IC1001
IC1003
IC1005
IC1099
IC1002
IC1004
IC1006
IC1007
Q1001
Q1006
Q1007
Q1010
TP1001
TP1099
K
SONY
CAD


TO P BOARD TU2101
RF-57 2P WHT-L
TO J BOARD J-57
CONTROL
+12V
RF
TUNER
UV816PLL TU101
AGC 12V VC OUT +5V SCL SDA AS IF IF
IF-BLOCK
VIF101 IFG389S
GND IF IF GND SIF AFT TUAGC VIDEO 12V GND
IC103 PCF8574
I²C-BUS I/O EXPANDER
MUTE-1
MUTE-2
Q126 DTA144EK
Q125 DTC144ES
MPX BUFFER
Q181 JC501TP
A-19 4P BLK
C4 C2MT C1MT M1/M2
TO K BOARD K-11
A-11 10P GRAY
C1MT C2MT C4 L OUT GND R OUT 4LEVEL NC GND GND
TO K BOARD K-12
A-12 10P GRAY
GND VIDEO GND AFT 33V 5V SCL SDA GND 12V
A-15 1P WHT
TO COATING EARTH ASSY
A
TUNER, SIF, VIF
A-16 2P RED
GND MPX
A-17 9P WHT
MUTE L1 4LVL1 R1 GND
A-13 12P
SIF-102
SOUND IF-BLOCK
TO IFG BOARD IFG-5.5S
E SIF PRC E CH1 4LEVEL CH2 E HP 12V VIDEO E
SOUND PRE-AMP R-1
SOUND PRE-AMP
Q114 2SC2712G
Q113 2SC2712G
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G

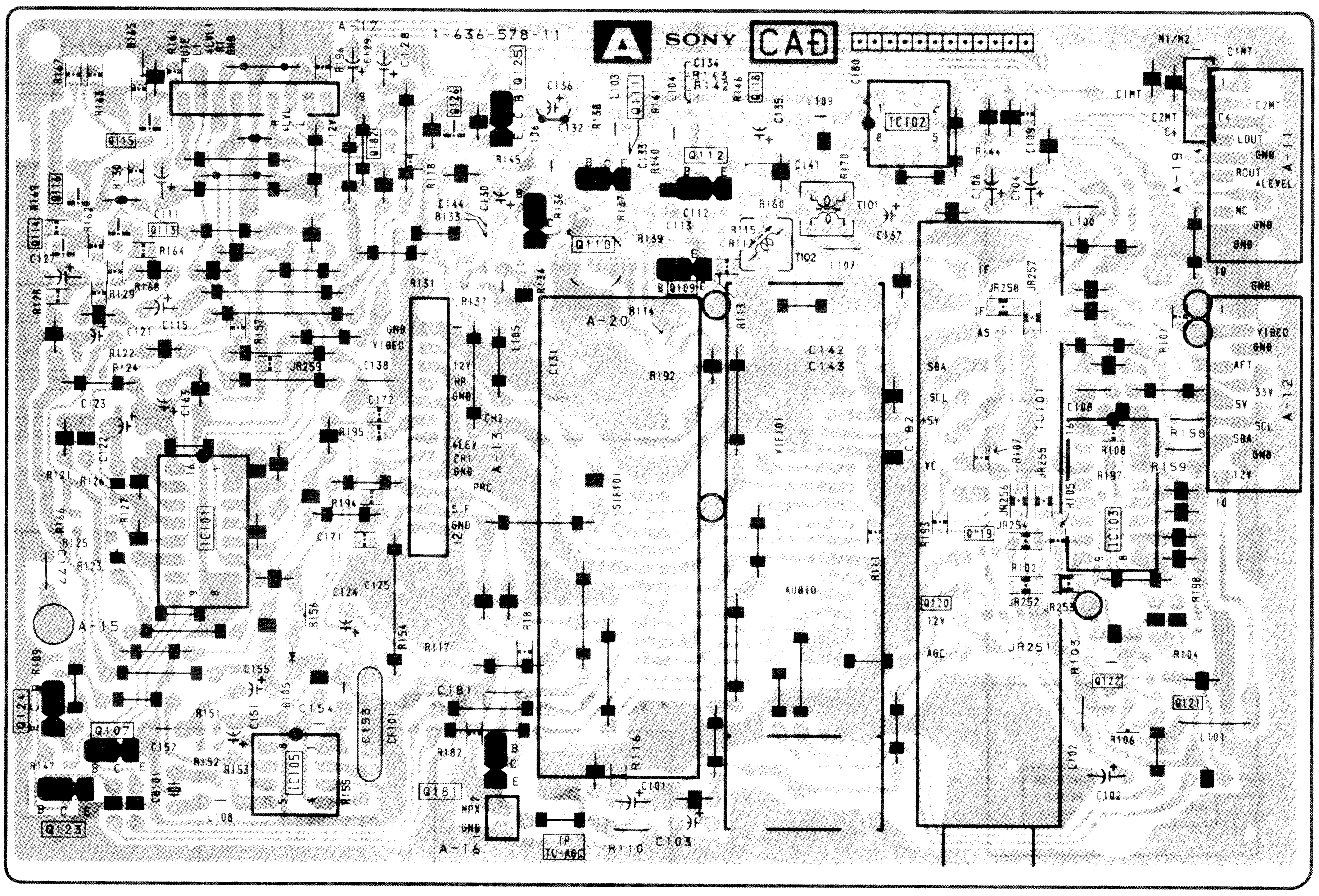
• WAVEFORMS A BOARD



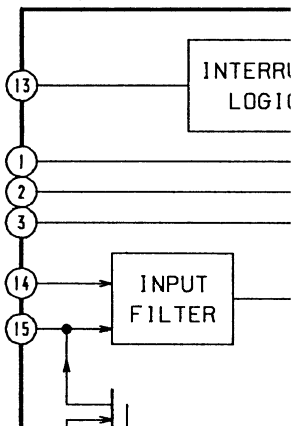
H2 BOARD IC951 BA1387

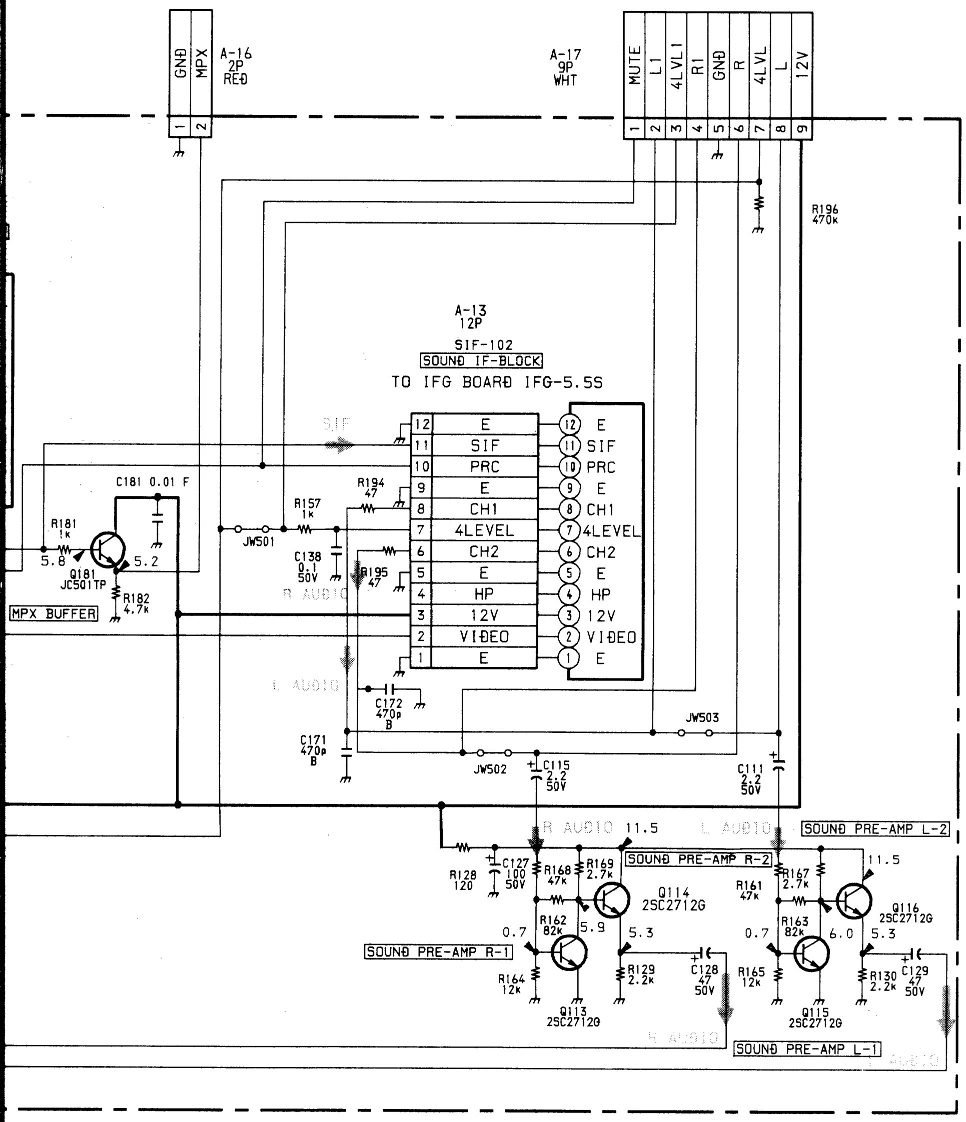


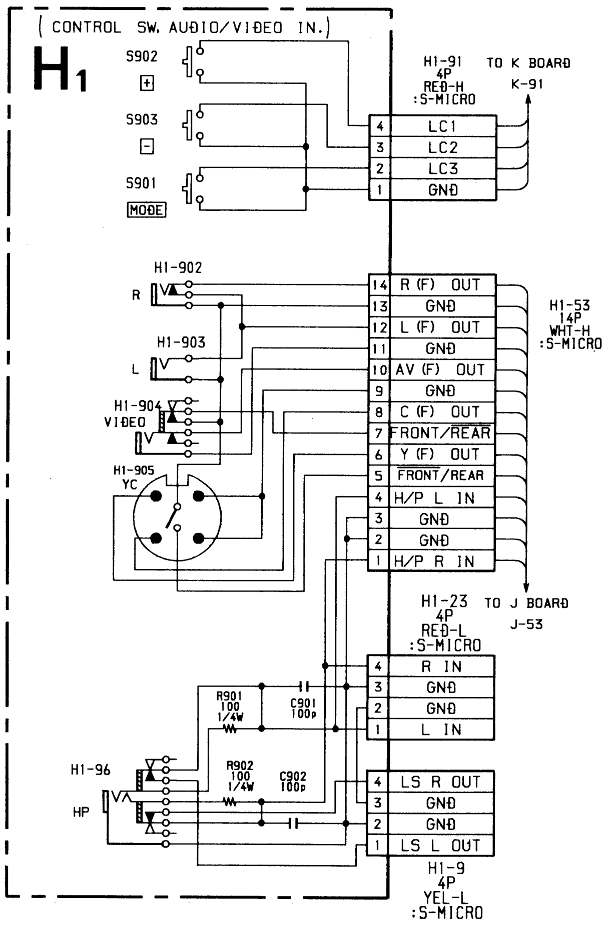
–A Board–


1-636-578-11
A
SONY
CAD
A-17
A-19
A-11
A-12
A-13
A-15
A-16
A-20
IC101
IC102
IC103
IC105
TU101
SIF101
VIF101

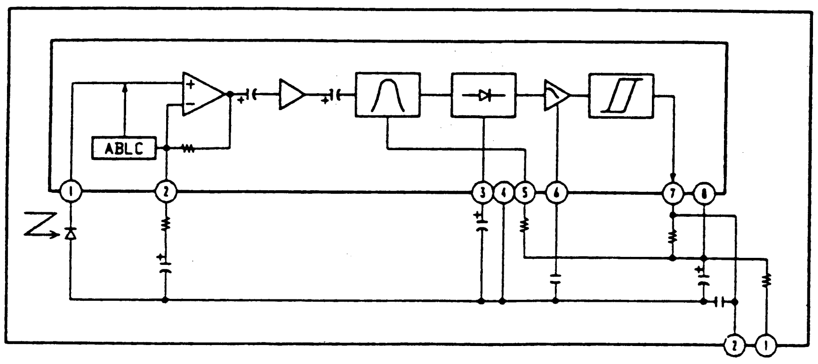
A BOARD IC103 PCF

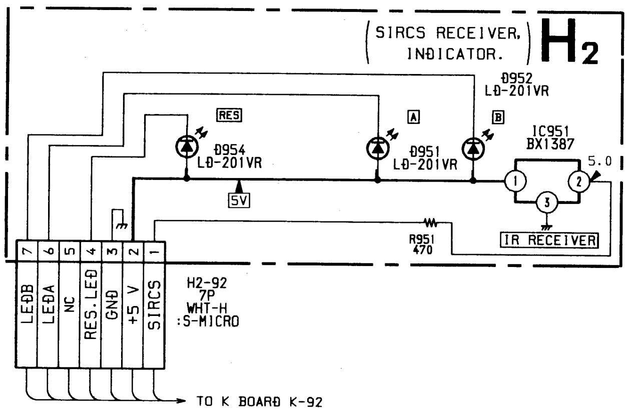

INTERRU
LOGIC
INPUT FILTER
POWER-ON RESET
13
1
2
3
14
15
16
8

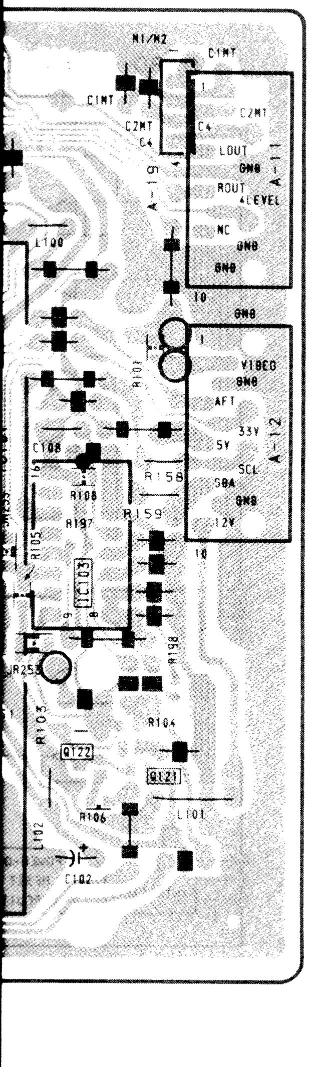

A-16
2P
RED
GND
MPX
A-17
9P
WHT
MUTE
L1
4LVL1
R1
GND
R
4LVL
L
12V
R196
470k
A-13
12P
SIF-102
SOUND IF-BLOCK
TO IFG BOARD IFG-5.5S
E
SIF
PRC
CH1
4LEVEL
CH2
HP
12V
VIDEO
C181 0.01 F
R181 1k
Q181 JC501TP
5.8
5.2
R182 4.7k
MPX BUFFER
R157 1k
R194 47
JW501
C138 0.1 50V
R195 47
C172 470p B
C171 470p B
JW502
C115 2.2 50V
JW503
C111 2.2 50V
R AUDIO 11.5
L AUDIO
SOUND PRE-AMP L-2
SOUND PRE-AMP R-2
R128 120
C127 100 50V
R168 47k
R169 2.7k
Q114 2SC2712G
R162 82k
0.7
5.9
5.3
SOUND PRE-AMP R-1
R164 12k
Q113 2SC2712G
R129 2.2k
C128 47 50V
R161 47k
R167 2.7k
11.5
Q116 2SC2712G
R163 82k
0.7
6.0
5.3
R165 12k
Q115 2SC2712G
R130 2.2k
C129 47 50V
SOUND PRE-AMP L-1


CONTROL SW. AUDIO/VIDEO IN.
H1
S902
+
S903
−
S901
MODE
H1-91
4P
RED-H
:S-MICRO
TO K BOARD
K-91
LC1
LC2
LC3
GND
H1-902
R
H1-903
L
H1-904
VIDEO
H1-905
YC
R (F) OUT
GND
L (F) OUT
GND
AV (F) OUT
GND
C (F) OUT
FRONT/REAR
Y (F) OUT
FRONT/REAR
H/P L IN
GND
GND
H/P R IN
H1-53
14P
WHT-H
:S-MICRO
H1-23
4P
RED-L
:S-MICRO
TO J BOARD
J-53
R IN
GND
GND
L IN
R901 100 1/4W
C901 100p
H1-96
HP
R902 100 1/4W
C902 100p
LS R OUT
GND
GND
LS L OUT
H1-9
4P
YEL-L
:S-MICRO

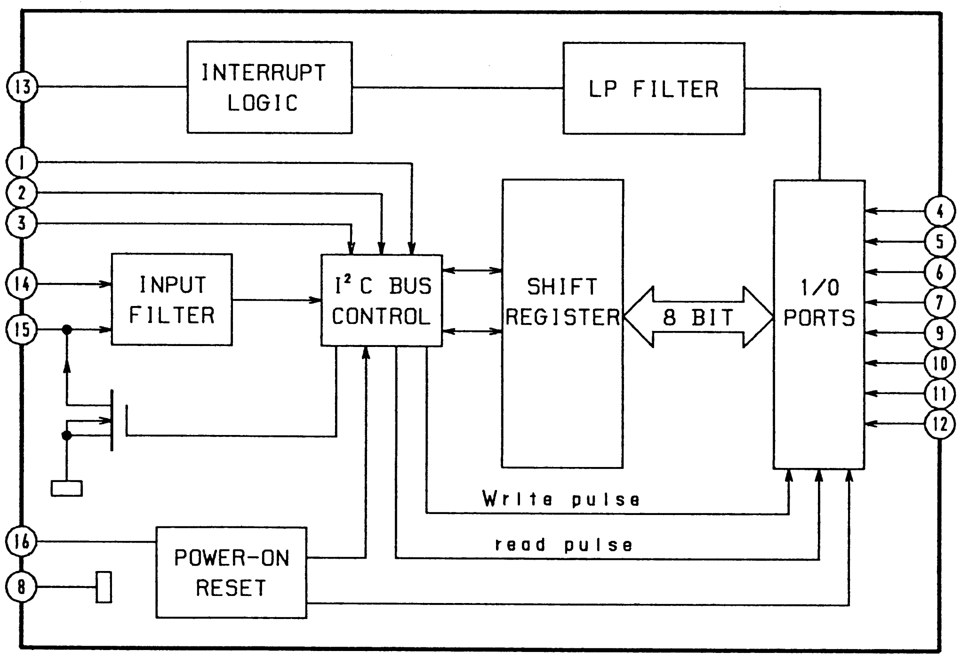
H2 BOARD IC951 BA1387


ABLC
1
2
3
4
5
6
7
8
2
1


SIRCS RECEIVER, INDICATOR.
H2
D952
LD-201VR
RES
A
B
D954
LD-201VR
D951
LD-201VR
IC951
BX1387
5.0
5V
R951
470
IR RECEIVER
LEDB
LEDA
NC
RES.LED
GND
+5 V
SIRCS
H2-92
7P
WHT-H
:S-MICRO
TO K BOARD K-92

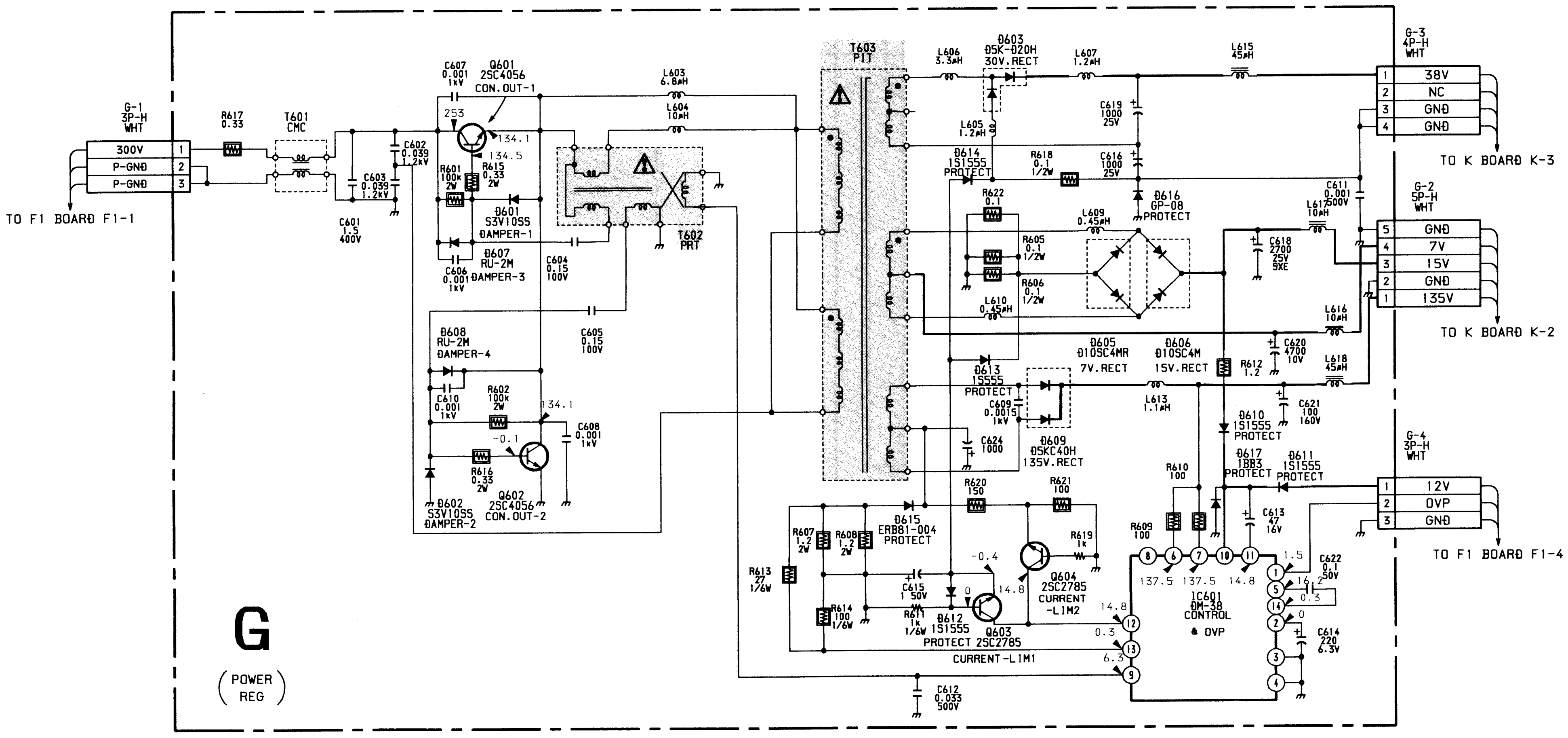

N1/N2
C1MT
C2MT
C4
LOUT
GND
ROUT
4LEVEL
NC
GND
A-19
A-11
L100
VIDEO
GND
AFT
33V
5V
SCL
SDA
GND
12V
A-12
R101
C108
R158
R108
R197
R159
R105
IC103
R198
R253
R103
R104
Q122
Q121
R106
L101
L102
C102

A BOARD IC103 PCF8574

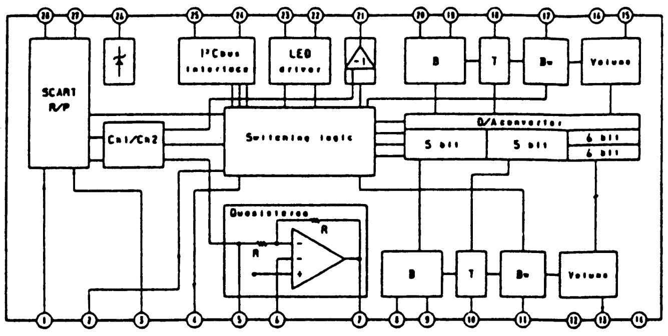

INTERRUPT LOGIC
LP FILTER
INPUT FILTER
I² C BUS CONTROL
SHIFT REGISTER
8 BIT
I/O PORTS
POWER-ON RESET
Write pulse
read pulse
13
1
2
3
14
15
16
8
4
5
6
7
9
10
11
12

1 2 3 4 5 6 7 8 9 10 11

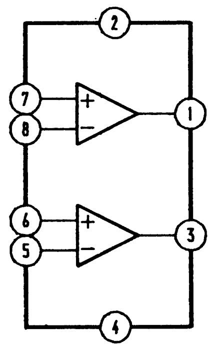
A B C D E F G H I J K L M N


G
(POWER REG)
G-1 3P-H WHT
300V
P-GND
P-GND
TO F1 BOARD F1-1
R617 0.33
T601 CMC
C601 1.5 400V
C602 0.039 1.2kV
C603 0.039 1.2kV
C607 0.001 1kV
Q601 2SC4056 CON.OUT-1
R601 100k 2W
R615 0.33 2W
D601 S3V10SS DAMPER-1
D607 RU-2M DAMPER-3
C606 0.001 1kV
C604 0.15 100V
L603 6.8µH
L604 10µH
T602 PRT
C605 0.15 100V
D608 RU-2M DAMPER-4
C610 0.001 1kV
R602 100k 2W
C608 0.001 1kV
R616 0.33 2W
Q602 2SC4056 CON.OUT-2
D602 S3V10SS DAMPER-2
T603 PIT
L606 3.3µH
D603 D5K-D20H 30V.RECT
L607 1.2µH
L615 45µH
L605 1.2µH
C619 1000 25V
D614 1S1555 PROTECT
R618 0.1 1/2W
C616 1000 25V
R622 0.1
D616 GP-08 PROTECT
L609 0.45µH
R605 0.1 1/2W
R606 0.1 1/2W
L610 0.45µH
C618 2700 25V 5XE
C611 0.001 500V
L617 10µH
L616 10µH
D605 D10SC4MR 7V.RECT
D606 D10SC4M 15V.RECT
R612 1.2
C620 4700 10V
L618 45µH
D613 1S555 PROTECT
C609 0.0015 1kV
D609 D5KC40H 135V.RECT
L613 1.1µH
C621 100 160V
D610 1S1555 PROTECT
C624 1000
D617 1BB3 PROTECT
D611 1S1555 PROTECT
R610 100
R620 150
R621 100
D615 ERB81-004 PROTECT
R607 1.2 2W
R608 1.2 2W
R619 1k
R609 100
C613 47 16V
C622 0.1 50V
R613 27 1/6W
C615 1 50V
Q604 2SC2785 CURRENT -LIM2
R614 100 1/6W
R611 1k 1/6W
D612 1S1555 PROTECT
Q603 2SC2785 CURRENT-LIM1
IC601 DM-38 CONTROL & OVP
C614 220 6.3V
C612 0.033 500V
G-3 4P-H WHT
38V
NC
GND
GND
TO K BOARD K-3
G-2 5P-H WHT
GND
7V
15V
GND
135V
TO K BOARD K-2
G-4 3P-H WHT
12V
OVP
GND
TO F1 BOARD F1-4
253
134.1
134.5
134.1
-0.1
-0.4
14.8
0
137.5
137.5
14.8
1.5
16.2
0.3
0
14.8
0.3
6.3

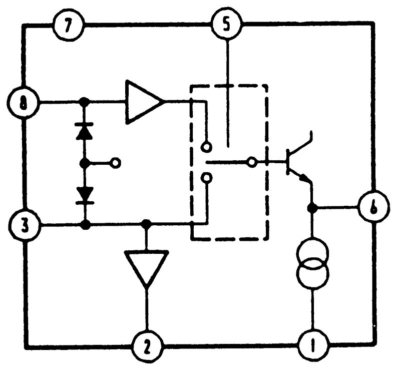
J BOARD IC201 TDA6200


SCART R/P
I²C bus interface
LED driver
B
T
B+
Volume
Ch1/Ch2
Switching logic
D/A converter
5 bit
5 bit
6 bit
6 bit
Quasistereo
R
R
B
T
B+
Volume

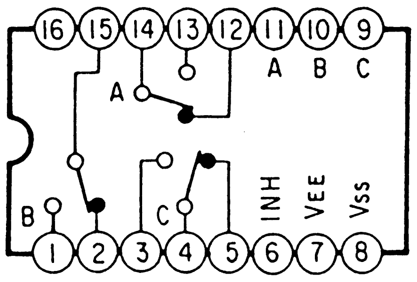
J BOARD IC204 TDA2822M



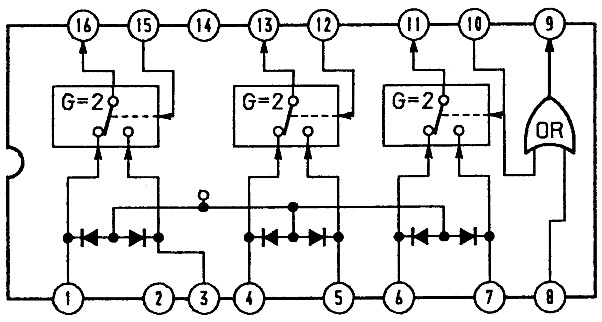
J BOARD IC1402 TEA2014A



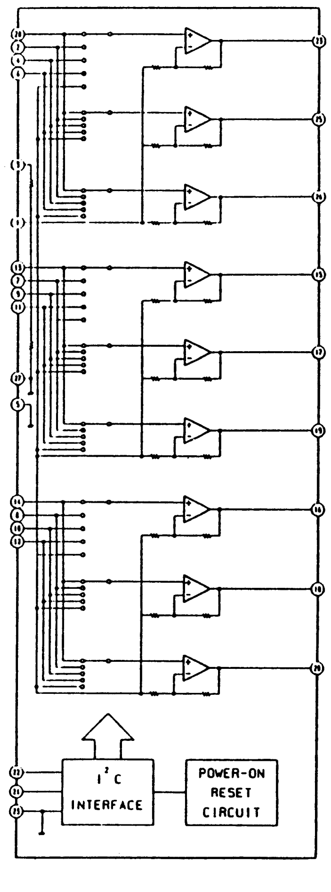
J BOARD IC1403 HD14053BP

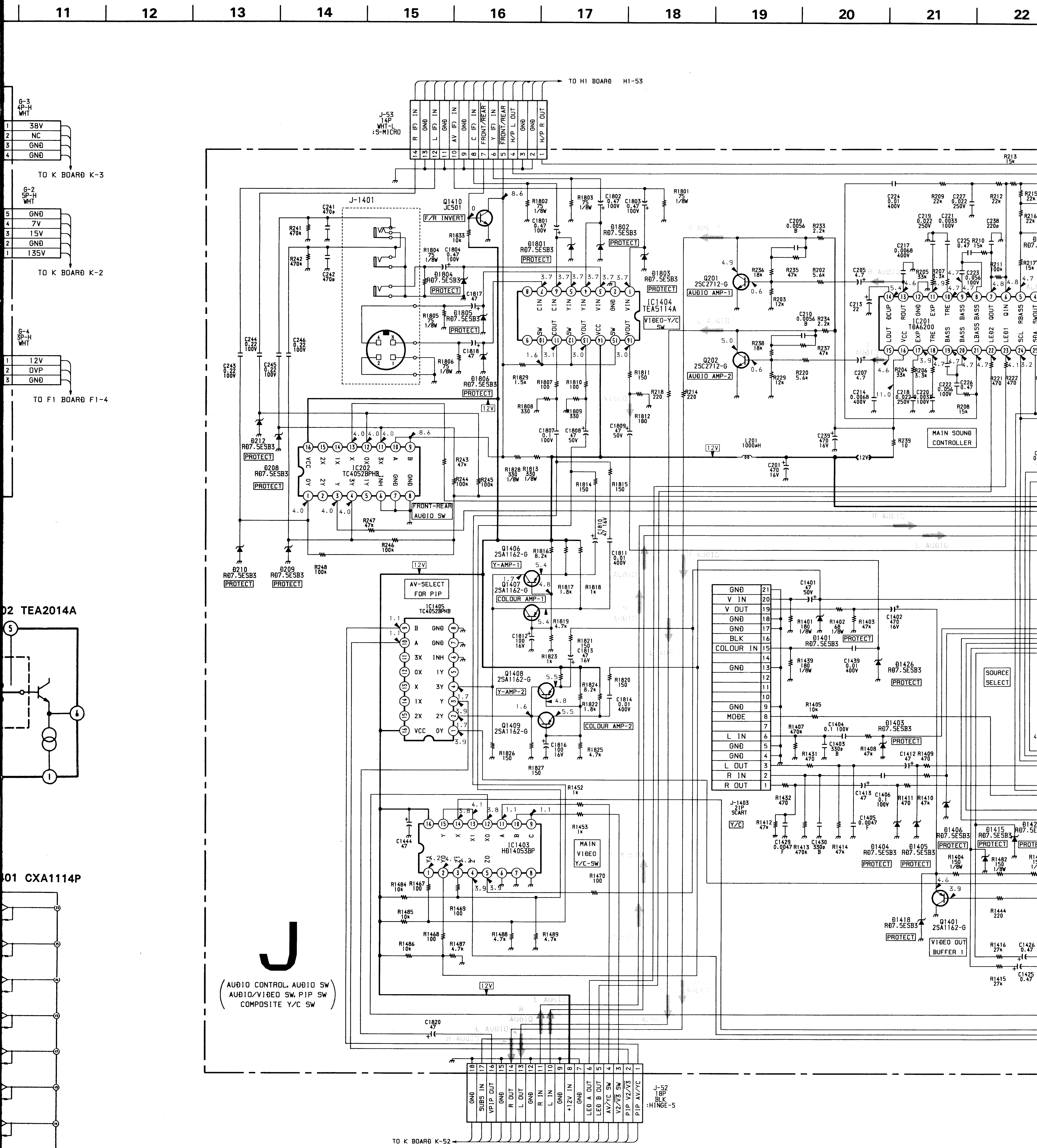

16
15
14
13
12
11
10
9
A
B
C
A
B
C
INH
VEE
Vss
1
2
3
4
5
6
7
8

J BOARD IC1404 TEA5114A

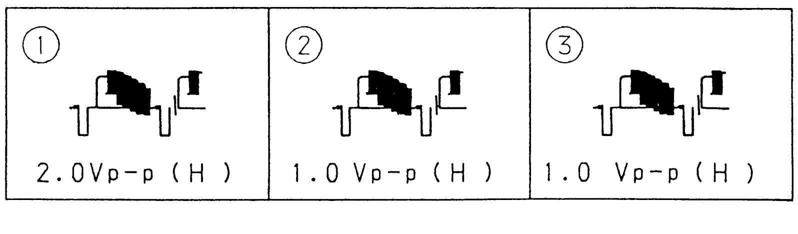

16
15
14
13
12
11
10
9
G=2
G=2
G=2
OR
1
2
3
4
5
6
7
8

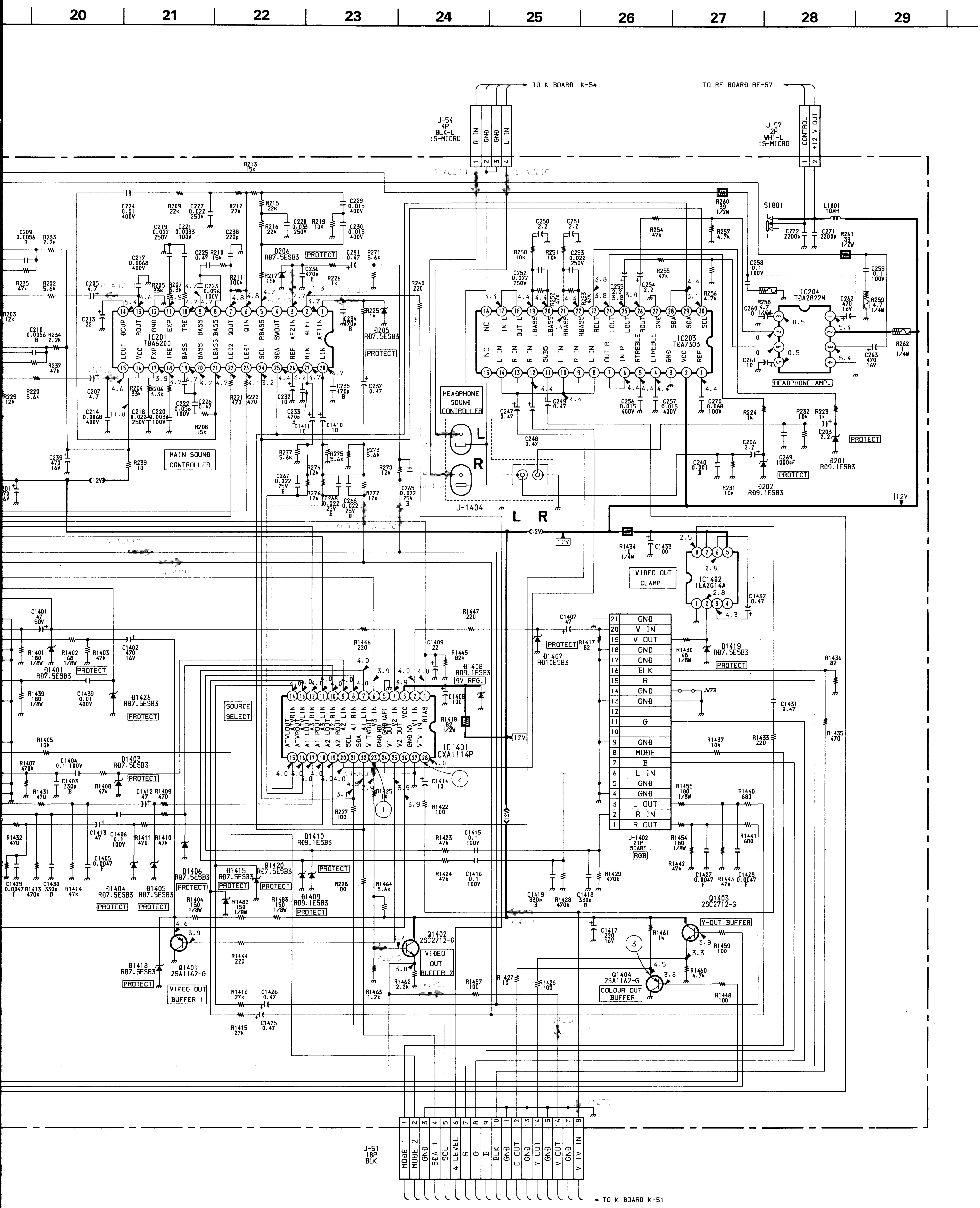
J BOARD IC1401 CXA1114P


I²C INTERFACE
POWER-ON RESET CIRCUIT


11
12
13
14
15
16
17
18
19
20
21
22
TO H1 BOARD H1-53
J-53 14P WHT-L :S-MICRO
R (F) IN
GND
L (F) IN
GND
AV (F) IN
GND
C (F) IN
FRONT/REAR
Y (F) IN
FRONT/REAR
H/P L OUT
GND
GND
H/P R OUT
G-3 4P-H WHT
38V
NC
GND
GND
TO K BOARD K-3
G-2 5P-H WHT
GND
7V
15V
GND
135V
TO K BOARD K-2
G-4 3P-H WHT
12V
OVP
GND
TO F1 BOARD F1-4
J-1401
Q1410 JC501
F/R INVERT
PROTECT
IC1404 TEA5114A
VIDEO-Y/C SW
Q201 2SC2712-G
AUDIO AMP-1
Q202 2SC2712-G
AUDIO AMP-2
IC201 TDA6200
MAIN SOUND CONTROLLER
IC202 TC4052BPHB
FRONT-REAR AUDIO SW
IC1405 TC4052BPHB
AV-SELECT FOR PIP
Q1406 2SA1162-G
Y-AMP-1
Q1407 2SA1162-G
COLOUR AMP-1
Q1408 2SA1162-G
Y-AMP-2
Q1409 2SA1162-G
COLOUR AMP-2
IC1403 HD14053BP
MAIN VIDEO Y/C-SW
J-1403 21P SCART
Y/C
GND
V IN
V OUT
GND
GND
BLK
COLOUR IN
GND
GND
MODE
L IN
GND
GND
L OUT
R IN
R OUT
SOURCE SELECT
Q1401 2SA1162-G
VIDEO OUT BUFFER 1
02 TEA2014A
01 CXA1114P
POWER-ON RESET CIRCUIT
J
AUDIO CONTROL, AUDIO SW
AUDIO/VIDEO SW, PIP SW
COMPOSITE Y/C SW
J-52 18P BLK :HINGE-S
GND
SUBS IN
VPIP OUT
GND
R OUT
L OUT
GND
R IN
L IN
+12V IN
GND
LED A OUT
LED B OUT
AV/YC SW
V2/V3 SW
PIP V2/V3
PIP AV/YC
TO K BOARD K-52

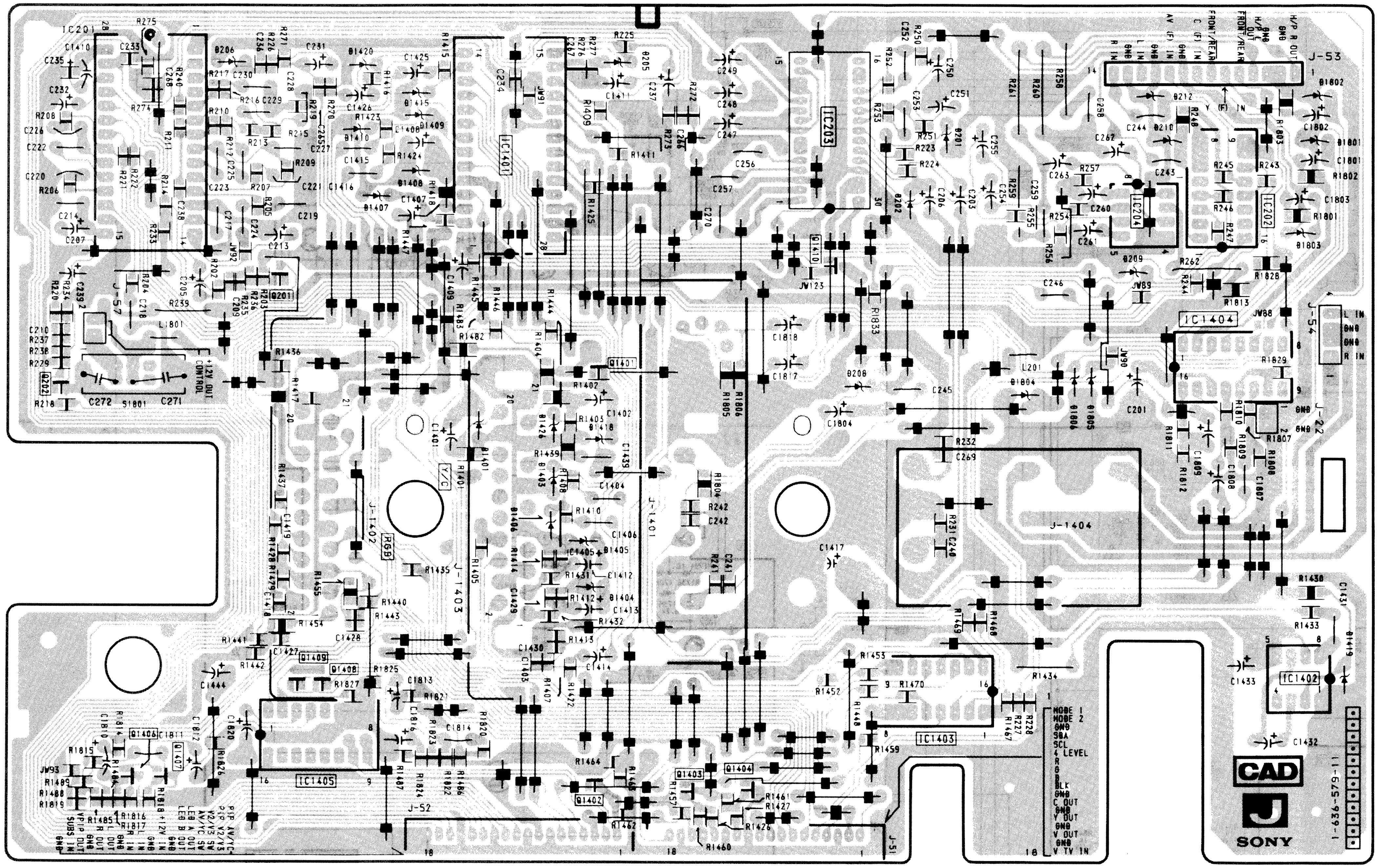
• WAVEFORMS J BOARD


①
2.0Vp-p (H)
②
1.0 Vp-p (H)
③
1.0 Vp-p (H)

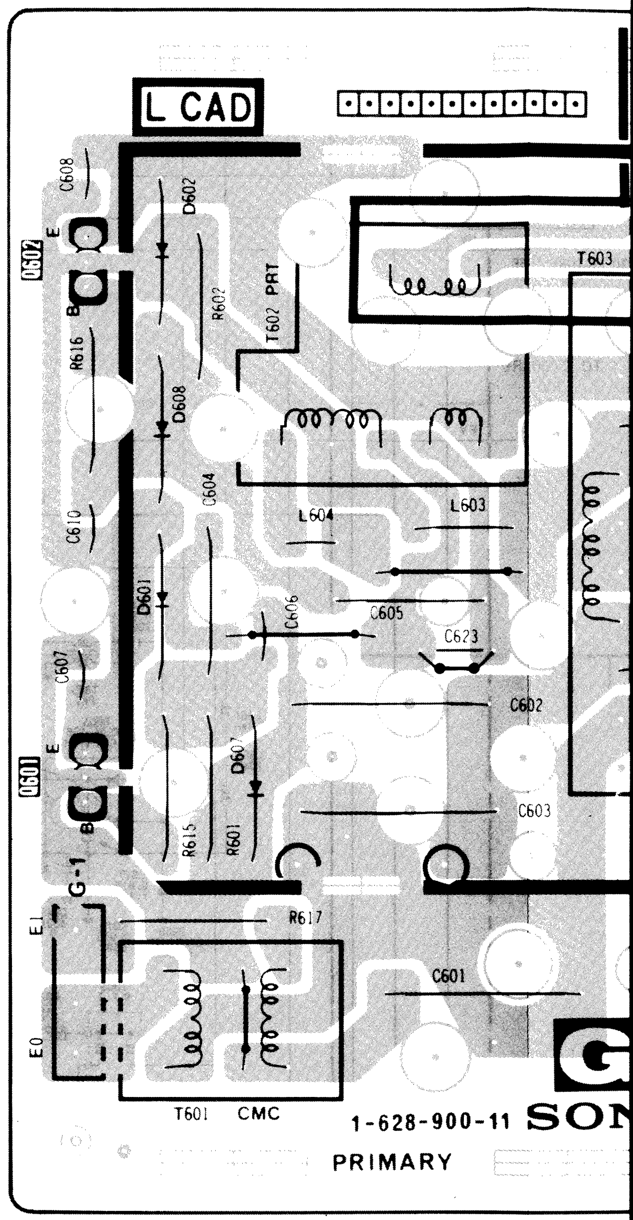

20
21
22
23
24
25
26
27
28
29
TO K BOARD K-54
TO RF BOARD RF-57
J-54 4P BLK-L :S-MICRO
R IN
GND
GND
L IN
J-57 2P WHT-L :S-MICRO
CONTROL
+12 V OUT
R AUDIO
L AUDIO
S1801
L1801 10µH
IC201 TDA6200
MAIN SOUND CONTROLLER
IC203 TDA7303
HEADPHONE SOUND CONTROLLER
IC204 TDA2822M
HEADPHONE AMP.
PROTECT
J-1404
L
R
12V
IC1402 TEA2014A
VIDEO OUT CLAMP
IC1401 CXA1114P
SOURCE SELECT
5V REG.
J-1402 21P SCART RGB
GND
V IN
V OUT
BLK
G
MODE
B
L IN
L OUT
R IN
R OUT
Q1401 2SA1162-G
VIDEO OUT BUFFER 1
Q1402 2SC2712-G
VIDEO OUT BUFFER 2
Q1403 2SC2712-G
Y-OUT BUFFER
Q1404 2SA1162-G
COLOUR OUT BUFFER
VIDEO
J-51 18P BLK
MODE 1
MODE 2
GND
SDA 1
SCL
4 LEVEL
R
G
B
BLK
GND
C OUT
GND
Y OUT
GND
V OUT
GND
V TV IN
TO K BOARD K-51

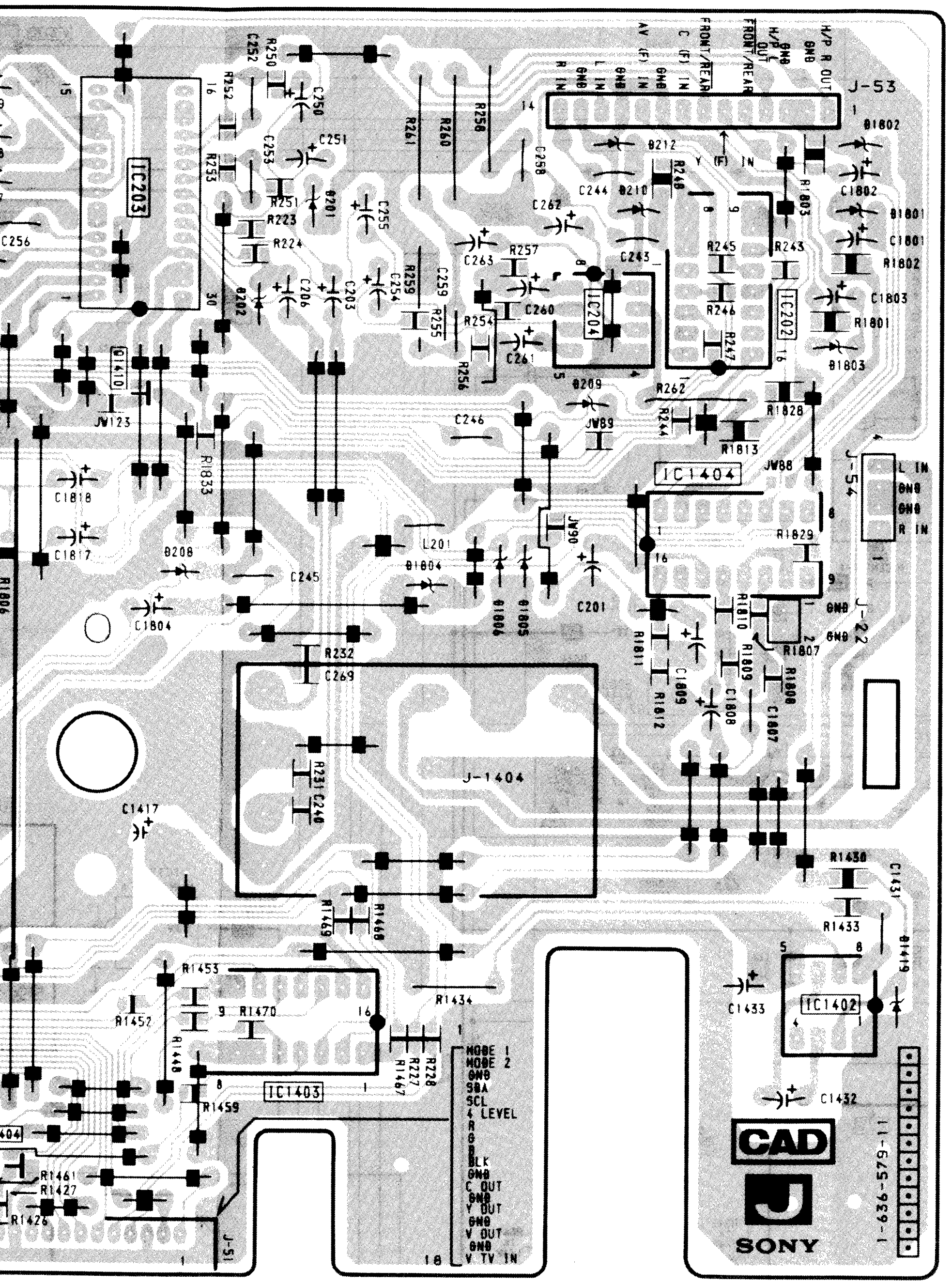
J [AUDIO CONTROL, AUDIO SW, AUDIO/VIDEO SW, PIN SW, COMPOSITE Y/C SW] G [POWER, REG]

–J Board–

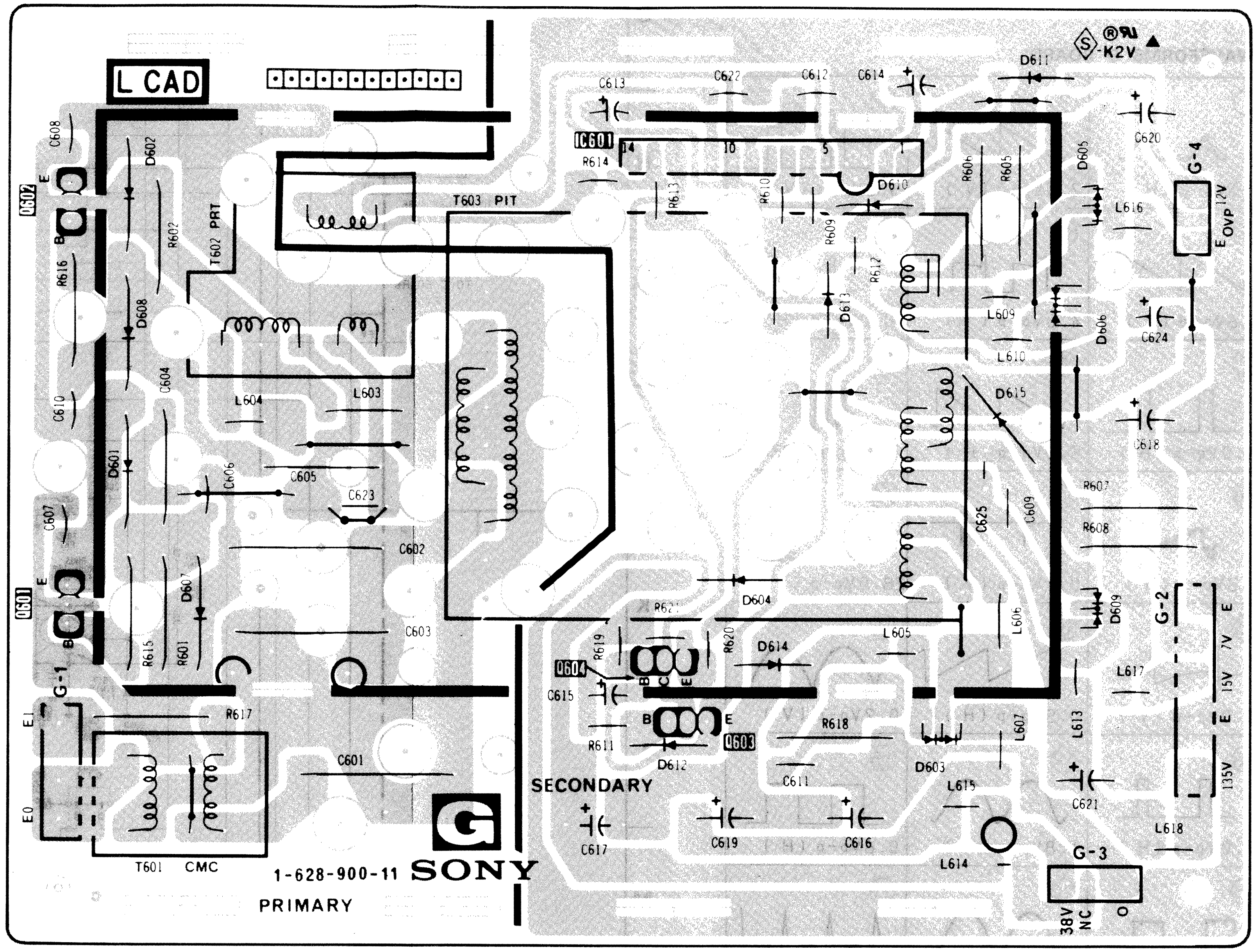

IC201
IC203
IC1401
IC202
IC204
IC1404
IC1402
IC1403
IC1405
J-53
J-54
J-52
J-51
J-57
J-1401
J-1402
J-1403
J-1404
Y/C
RGB
+12V OUT
CONTROL
S1801
C272
C271
L IN
GND
GND
R IN
H/P R OUT
H/P L OUT
FRONT/REAR
C (F) IN
AV (F) IN
L IN
R IN
Y (F) IN
MODE 1
MODE 2
GND
SDA
SCL
4 LEVEL
R
G
B
BLK
C OUT
GND
Y OUT
GND
V OUT
GND
V TV IN
CAD
J
SONY
1-636-579-11

–G Board–

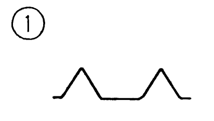
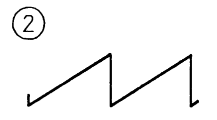
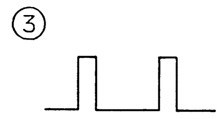
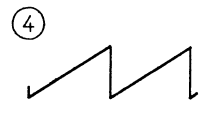
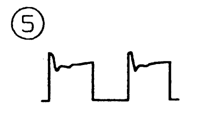
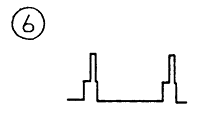
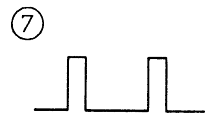
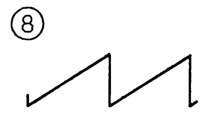
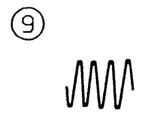
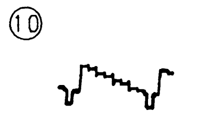
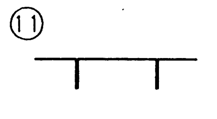
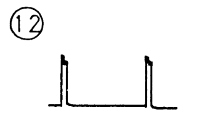
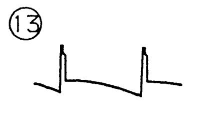
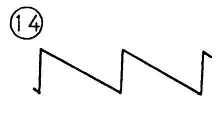
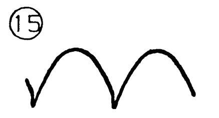
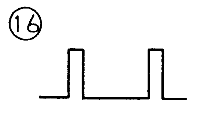
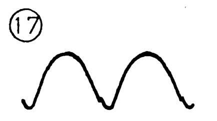
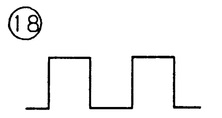
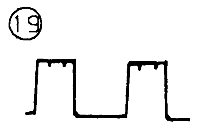
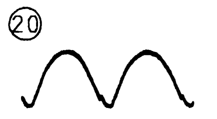
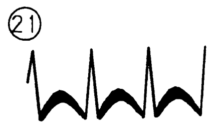
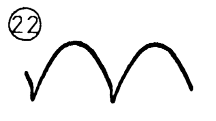
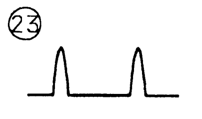
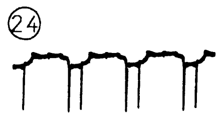
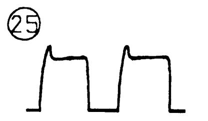
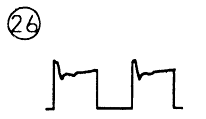

L CAD
T603
T602 PRT
D602
D608
D601
D607
Q602
Q601
C608
C610
C607
C604
C605
C606
C623
C602
C603
C601
R602
R616
R615
R601
R617
L604
L603
G-1
E1
E0
T601
CMC
1-628-900-11
SON
PRIMARY

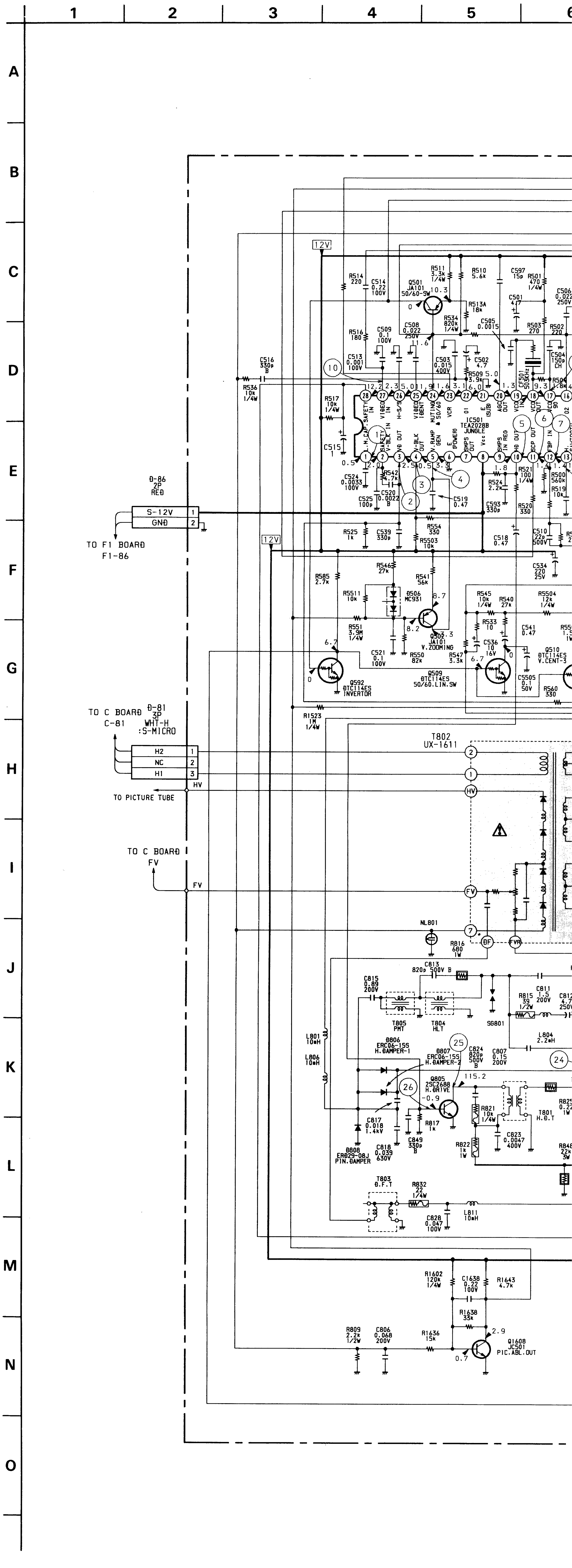

J-53
J-54
J-22
J-1404
J-51
IC203
IC204
IC202
IC1404
IC1402
IC1403
IC1410
H/P R OUT
GND
H/P L OUT
FRONT/REAR
C (F) IN
GND
AV (F) IN
L IN
GND
R IN
Y (F) IN
MODE 1
MODE 2
GND
SDA
SCL
4 LEVEL
R
G
B
BLK
GND
C OUT
GND
Y OUT
GND
V OUT
GND
V TV IN
CAD
J
SONY
1-636-579-11

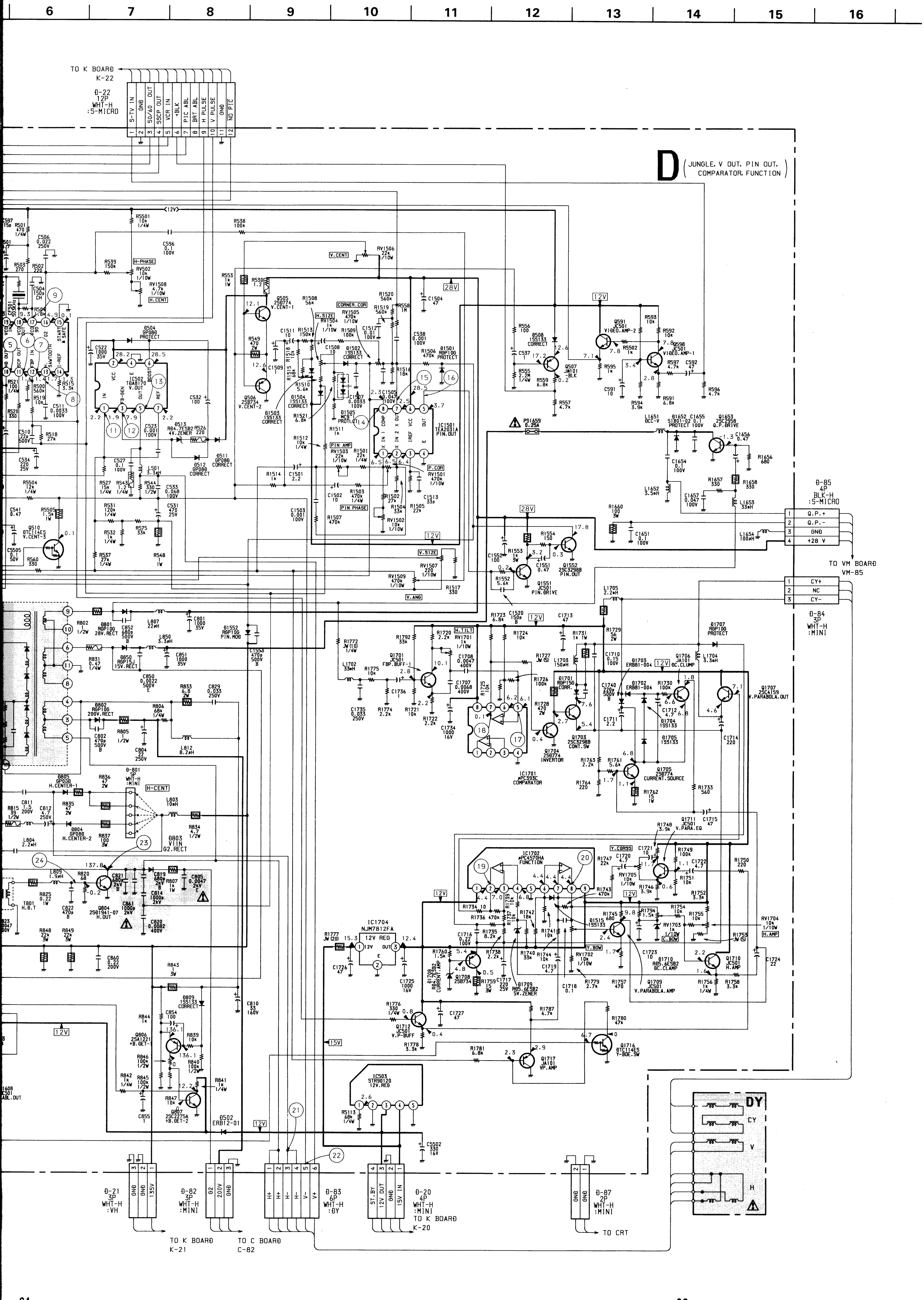
—G Board—


L CAD
IC601
T603 PIT
T602 PRT
T601 CMC
Q601
Q602
Q603
Q604
G-1
G-2
G-3
G-4
E
OVP 12V
135V
15V
7V
38V
NC
O
K2V
SECONDARY
PRIMARY
1-628-900-11
G
SONY

• WAVEFORMS D BOARD

①  1.3Vp-p (H)	②  2.5Vp-p (V)	③  5.6Vp-p (V)
④  2.6Vp-p (V)	⑤  4.0Vp-p (H)	⑥  10.0Vp-p (H)
⑦  14.0Vp-p (H)	⑧  3.6Vp-p (H)	⑨  3.2Vp-p (503KHz)
⑩  1.3Vp-p (H)	⑪  0.7Vp-p (V)	⑫  28.0Vp-p (V)
⑬  50.0Vp-p (V)	⑭  0.9Vp-p (H)	⑮  0.2Vp-p (V)
⑯  27.0Vp-p (H)	⑰  1.8Vp-p (H)	⑱  0.6Vp-p (H)
⑲  6.8Vp-p (V)	⑳  4.0Vp-p (V)	㉑  210.0Vp-p (H)
㉒  10.0Vp-p (V)	㉓  1.000Vp-p (H)	㉔  15.0Vp-p (H)
㉕  230.0Vp-p (H)	㉖  3.5Vp-p (H)	


1
2
3
4
5
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
D-86
2P
RED
S-12V
GND
TO F1 BOARD
F1-86
TO C BOARD
C-81
D-81
3P
WHT-H
:S-MICRO
H2
NC
H1
HV
TO PICTURE TUBE
TO C BOARD
FV
12V
IC501
TEA2028B
JUNGLE
Q501
JA101
50/60-SW
Q506
MC931
Q502
JA101
V.ZOOMING
Q592
DTC114ES
INVERTOR
Q509
DTC114ES
50/60.LIN.SW
Q510
DTC114ES
V.CENT-3
T802
UX-1611
NL801
R816
680
1W
C813
820p 500V B
C815
0.89
200V
T805
PMT
T804
HLT
SG801
D806
ERC06-15S
H.DAMPER-1
D807
ERC06-15S
H.DAMPER-2
C824
820p
500V
B
C807
0.15
200V
L804
2.2mH
C811
1.5
200V
R815
39
1/2W
Q805
2SC2688
H.DRIVE
115.2
-0.9
R821
10k
1/4W
T801
H.D.T
C823
0.0047
400V
R822
1k
1W
C817
0.018
1.4kV
C818
0.039
630V
C849
330p
B
R817
1k
D808
ERB29-08J
PIN.DAMPER
L801
10mH
L806
10mH
T803
D.F.T
R832
22
1/4W
C828
0.047
100V
L811
10mH
R1602
120k
1/4W
C1638
0.22
100V
R1643
4.7k
R1638
33k
R809
2.2k
1/2W
C806
0.068
200V
R1636
15k
Q1608
JC501
PIC.ABL.OUT
2.9
0.7
R1523
1M
1/4W
C516
330p
B
R536
10k
1/4W


6
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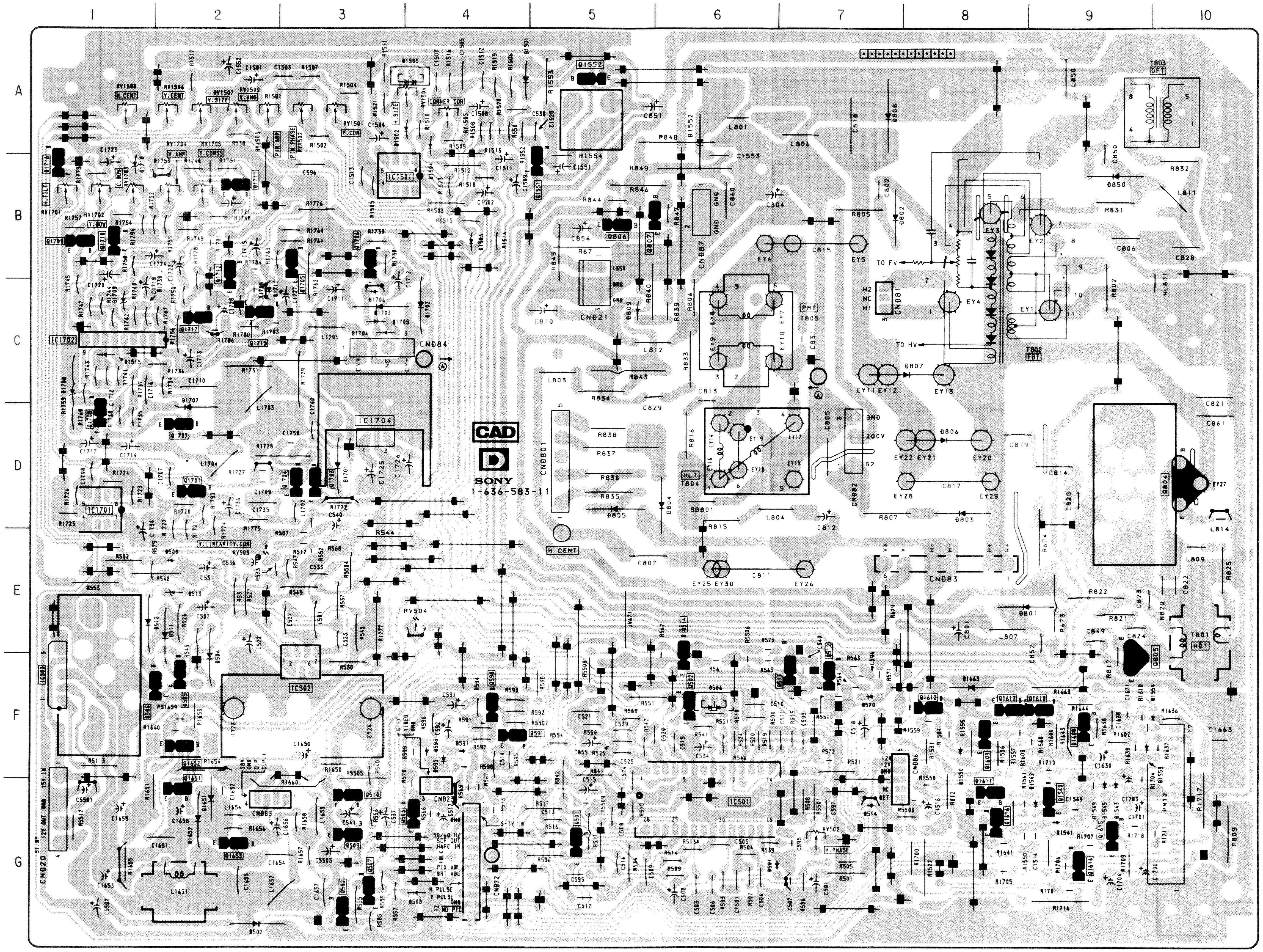
11
12
13
14
15
16
D
JUNGLE, V OUT, PIN OUT, COMPARATOR, FUNCTION
TO K BOARD
K-22
Ð-22
12P
WHT-H
:S-MICRO
S-TV IN
GND
50/60 OUT
SSCP OUT
VCR IN
+BLK
PIC ABL
BRT ABL
H PULSE
V PULSE
GND
NO PIC
H-PHASE
H.CENT
V.CENT
CORNER.COR
H.SIZE
PIN AMP
PIN PHASE
P.COR
V.SIZE
V.ANG
H.TILT
Y.CORSS
Y.BOW
C.BOW
H.AMP
H-CENT
28V
12V
15V
IC502
TDA8170
V.OUT
IC1501
TEA2031A
PIN.OUT
IC1701
μPC393C
COMPARATOR
IC1702
μPC4570HA
FUNCTION
IC1704
NJM7812FA
12V REG
IC503
STR90120
12V.REG
Q505
2SB774
V.CENT-1
Q506
2SB734
V.CENT-2
Q510
DTC114ES
V.CENT-3
Q591
JC501
VIDEO.AMP-2
Q598
JC501
VIDEO.AMP-1
Q507
JA101
-BLK
Q1551
JC501
PIN.DRIVE
Q1552
2SC3298B
PIN.OUT
Q1653
2SC2958
Q.P.DRIVE
Q1701
JC501
FBP.BUFF-1
Q1703
2SC3298B
CONT.SW
Q1704
2SD774
INVERTOR
Q1705
2SD774
CURRENT.SOURCE
Q1706
JA101
DC.CLUMP
Q1707
2SC4159
V.PARABOLA.OUT
Q1708
2SB734
Q1709
JC501
V.PARABOLA.AMP
Q1710
JC501
H.AMP
Q1711
JC501
V.PARA.EQ
Q1712
JC501
V.P-BUFF
Q1716
DTC114ES
Y-BOE.SW
Q1717
JA101
VP.AMP
Q804
2SD1941-07
H.OUT
Q806
2SA1221
+B.DET-1
Q807
2SC2275A
+B.DET-2
PS1659
0.25A
Ð-85
4P
BLK-H
:S-MICRO
Q.P.+
Q.P.-
GND
+28 V
TO VM BOARD
VM-85
CY+
NC
CY-
Ð-84
3P
WHT-H
:MINI
Ð-801
5P
WHT-H
:MINI
T801
H.B.T
DY
CY
V
H
Ð-21
3P
WHT-H
:VH
GND
GND
135V
Ð-82
3P
WHT-H
:MINI
G2
200V
GND
Ð-83
6P
WHT-H
:DY
H+
H+
H-
H-
V-
V+
Ð-20
4P
WHT-H
:MINI
ST.BY
12V OUT
GND
15V IN
TO K BOARD
K-20
Ð-87
2P
WHT-H
:MINI
GND
GND
TO CRT
TO K BOARD
K-21
TO C BOARD
C-82

D [JUNGLE, V OUT, PIN OUT, COMPARATOR, FUNCTION]

–D Board–

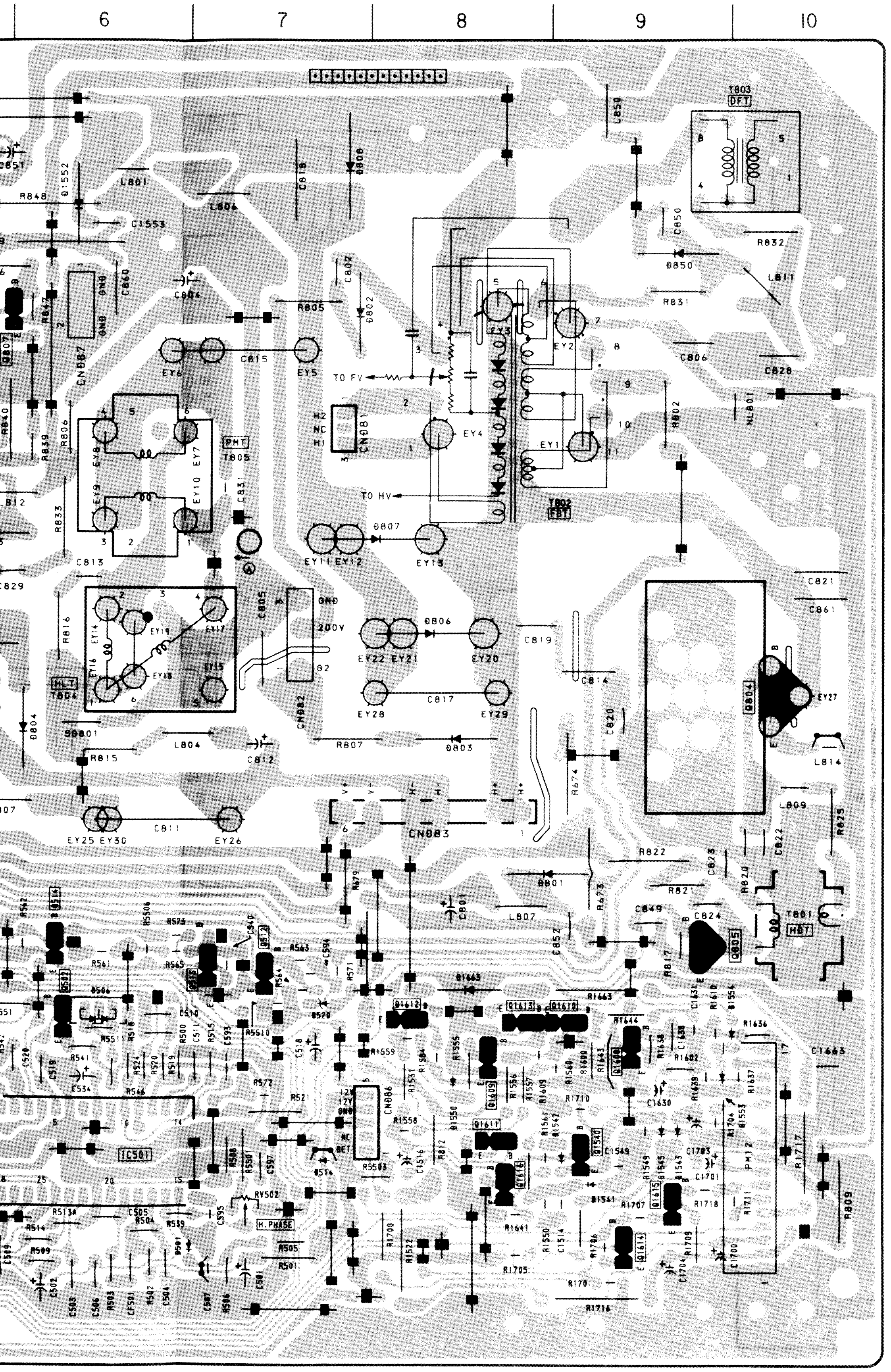


IC	
IC501	G–6
IC502	F–3
IC503	F–1
IC1501	B–3
IC1701	D–1
IC1702	C–1
IC1704	D–3

TRANSISTOR	
Q501	G–5
Q502	F–6
Q505	F–2
Q506	F–2
Q507	G–3
Q509	G–3
Q510	G–3
Q591	F–4
Q592	G–3
Q598	F–4
Q804	D–10
Q805	E–9
Q806	B–5
Q807	B–5
Q1551	B–5
Q1552	A–5
Q1608	F–9
Q1653	G–2
Q1701	D–2
Q1703	D–3
Q1704	D–3
Q1705	B–3
Q1706	B–3
Q1707	D–2
Q1708	D–1
Q1709	B–1
Q1710	B–1
Q1711	B–2
Q1712	B–2
Q1716	B–1
Q1717	C–2

DIODE	
D501	G–6
D502	G–2
D504	E–2
D506	F–6
D508	G–4
D511	E–2
D512	E–1
D513	E–2
D801	E–8
D802	B–7
D803	D–8
D804	D–6
D805	D–5
D806	D–8
D807	C–8
D808	A–7
D809	C–5
D850	B–9
D1501	A–4
D1502	A–3
D1503	B–4
D1504	B–4
D1505	A–3
D1515	C–1
D1552	A–6
D1652	G–2
D1701	D–3
D1702	C–4
D1703	C–3
D1704	C–3
D1705	C–3
D1707	D–2
D1708	C–1
D1709	C–1
D1710	B–1

VARIABLE RESISTOR	
RV502	G–7
RV1501	A–3
RV1502	A–3
RV1503	A–2
RV1504	A–4
RV1505	A–4
RV1506	A–2
RV1507	A–2
RV1508	A–1
RV1509	A–2
RV1701	B–1
RV1702	B–1
RV1703	B–1
RV1704	B–2
RB1705	B–2


6
7
8
9
10
T803
DFT
T802
FBT
T801
HBT
T804
HLT
T805
PMT
TO FV
TO HV
CN881
CN882
CN883
CN886
CN887
IC501
RV502
H.PHASE
EY1
EY2
EY4
EY5
EY6
EY7
EY8
EY9
EY10
EY11 EY12
EY13
EY20
EY21
EY22
EY25 EY3C
EY26
EY27
EY28
EY29
GND
200V
H2
NC
H1

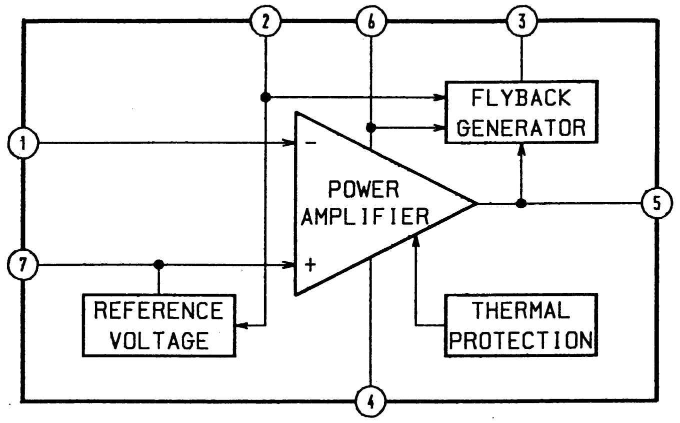
IC	
IC501	G－6
IC502	F－3
IC503	F－1
IC1501	B－3
IC1701	D－1
IC1702	C－1
IC1704	D－3

TRANSISTOR	
Q501	G－5
Q502	F－6
Q505	F－2
Q506	F－2
Q507	G－3
Q509	G－3
Q510	G－3
Q591	F－4
Q592	G－3
Q598	F－4
Q804	D－10
Q805	E－9
Q806	B－5
Q807	B－5
Q1551	B－5
Q1552	A－5
Q1608	F－9
Q1653	G－2
Q1701	D－2
Q1703	D－3
Q1704	D－3
Q1705	B－3
Q1706	B－3
Q1707	D－2
Q1708	D－1
Q1709	B－1
Q1710	B－1
Q1711	B－2
Q1712	B－2
Q1716	B－1
Q1717	C－2

DIODE	
D501	G－6
D502	G－2
D504	E－2
D506	F－6
D508	G－4
D511	E－2
D512	E－1
D513	E－2
D801	E－8
D802	B－7
D803	D－8
D804	D－6
D805	D－5
D806	D－8
D807	C－8
D808	A－7
D809	C－5
D850	B－9
D1501	A－4
D1502	A－3
D1503	B－4
D1504	B－4
D1505	A－3
D1515	C－1
D1552	A－6
D1652	G－2
D1701	D－3
D1702	C－4
D1703	C－3
D1704	C－3
D1705	C－3
D1707	D－2
D1708	C－1
D1709	C－1
D1710	B－1

VARIABLE RESISTOR	
RV502	G－7
RV1501	A－3
RV1502	A－3
RV1503	A－2
RV1504	A－4
RV1505	A－4
RV1506	A－2
RV1507	A－2
RV1508	A－1
RV1509	A－2
RV1701	B－1
RV1702	B－1
RV1703	B－1
RV1704	B－2
RB1705	B－2

D BOARD IC502 TD8170


1
2
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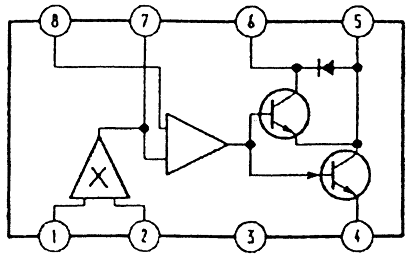
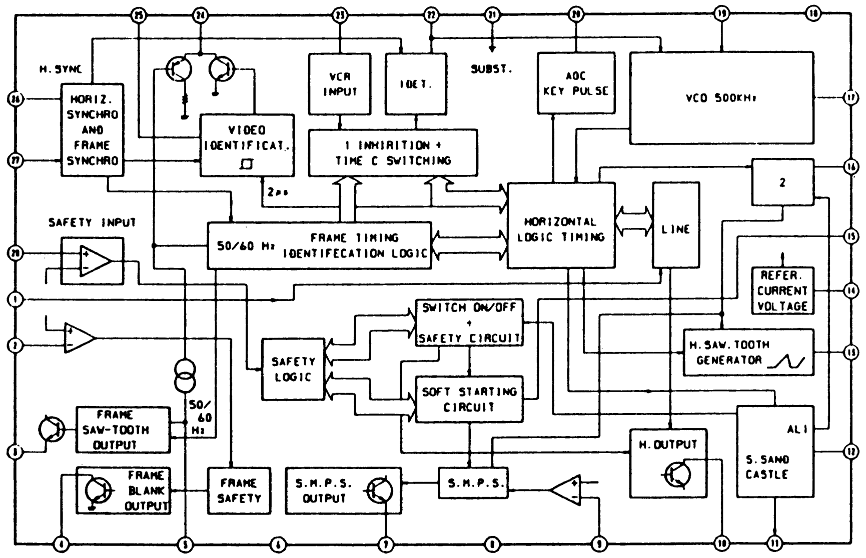
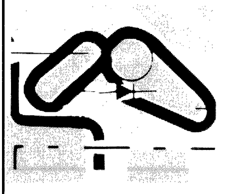
7
FLYBACK GENERATOR
POWER AMPLIFIER
REFERENCE VOLTAGE
THERMAL PROTECTION
−
+

D BOARD IC1501 TEA2031A

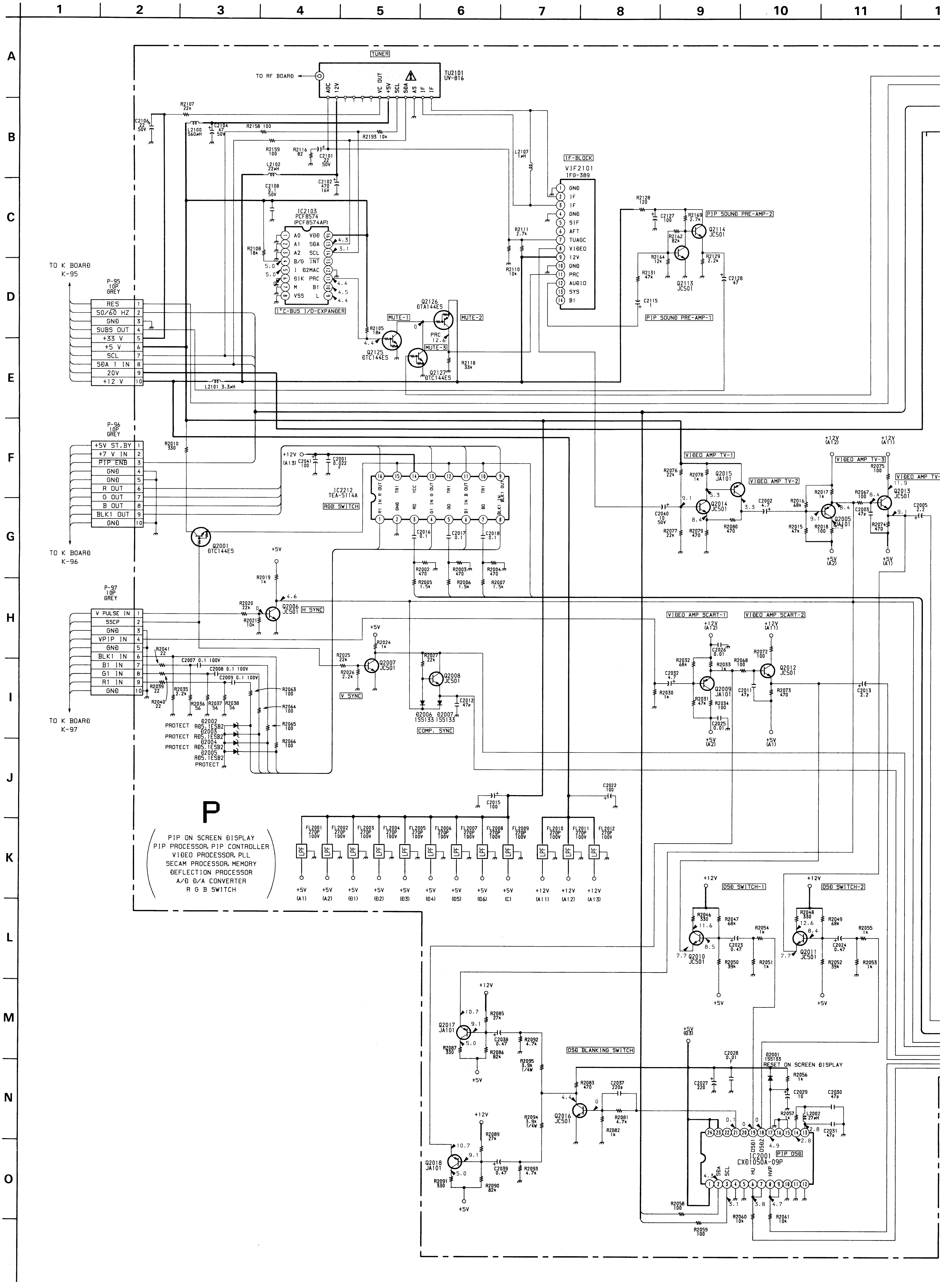


D BOARD IC501 TEA2028B

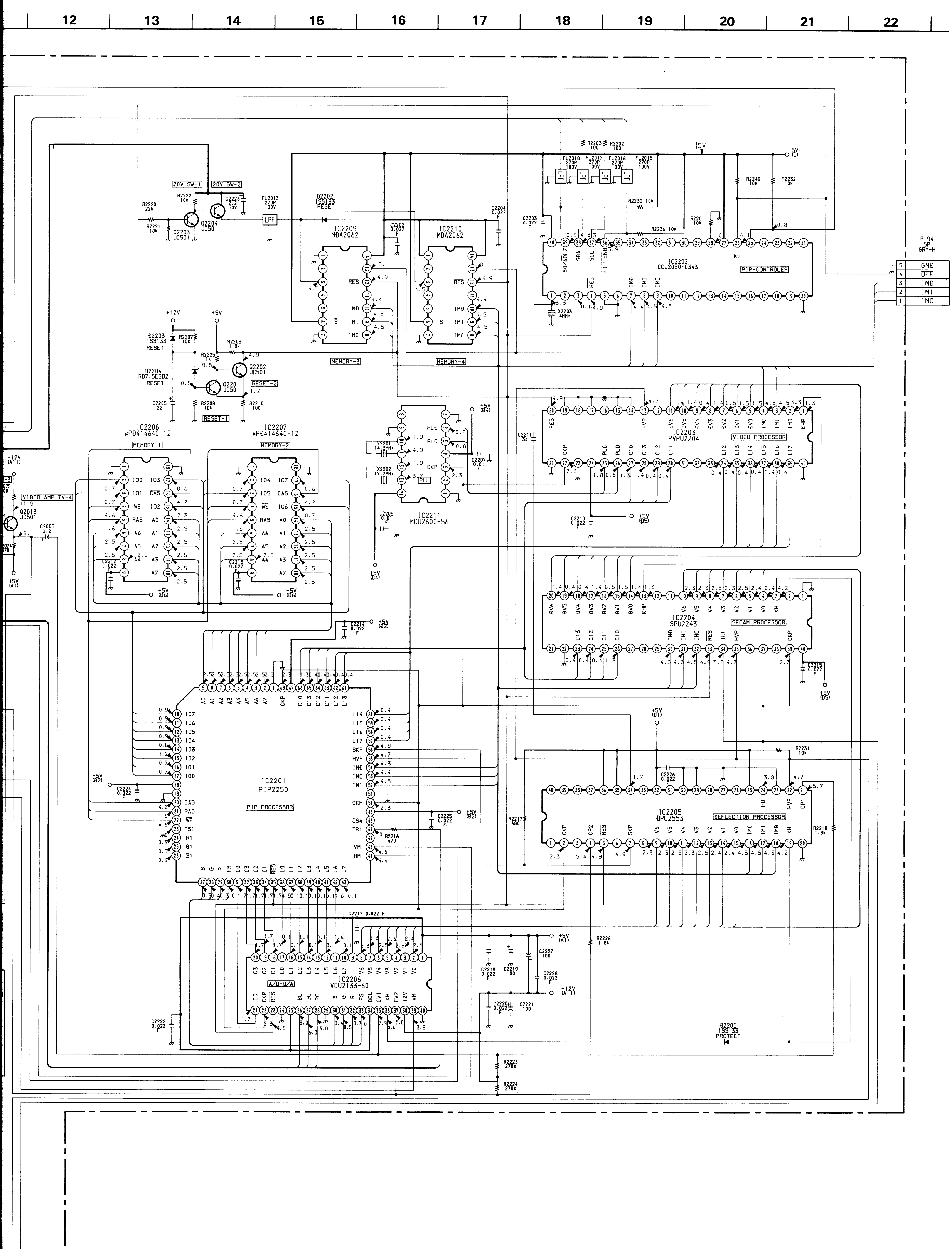

H. SYNC
HORIZ. SYNCHRO AND FRAME SYNCHRO
VIDEO IDENTIFICAT.
VCR INPUT
IDET.
I INHIRITION + TIME C SWITCHING
SUBST.
AOC KEY PULSE
VCO 500KHz
2
2μs
SAFETY INPUT
50/60 Hz FRAME TIMING IDENTIFECATION LOGIC
HORIZONTAL LOGIC TIMING
LINE
REFER. CURRENT VOLTAGE
SWITCH ON/OFF + SAFETY CIRCUIT
SAFETY LOGIC
SOFT STARTING CIRCUIT
H. SAW. TOOTH GENERATOR
50/60 Hz
FRAME SAW-TOOTH OUTPUT
FRAME BLANK OUTPUT
FRAME SAFETY
S.M.P.S. OUTPUT
S.M.P.S.
H. OUTPUT
ALI
S. SAND CASTLE



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

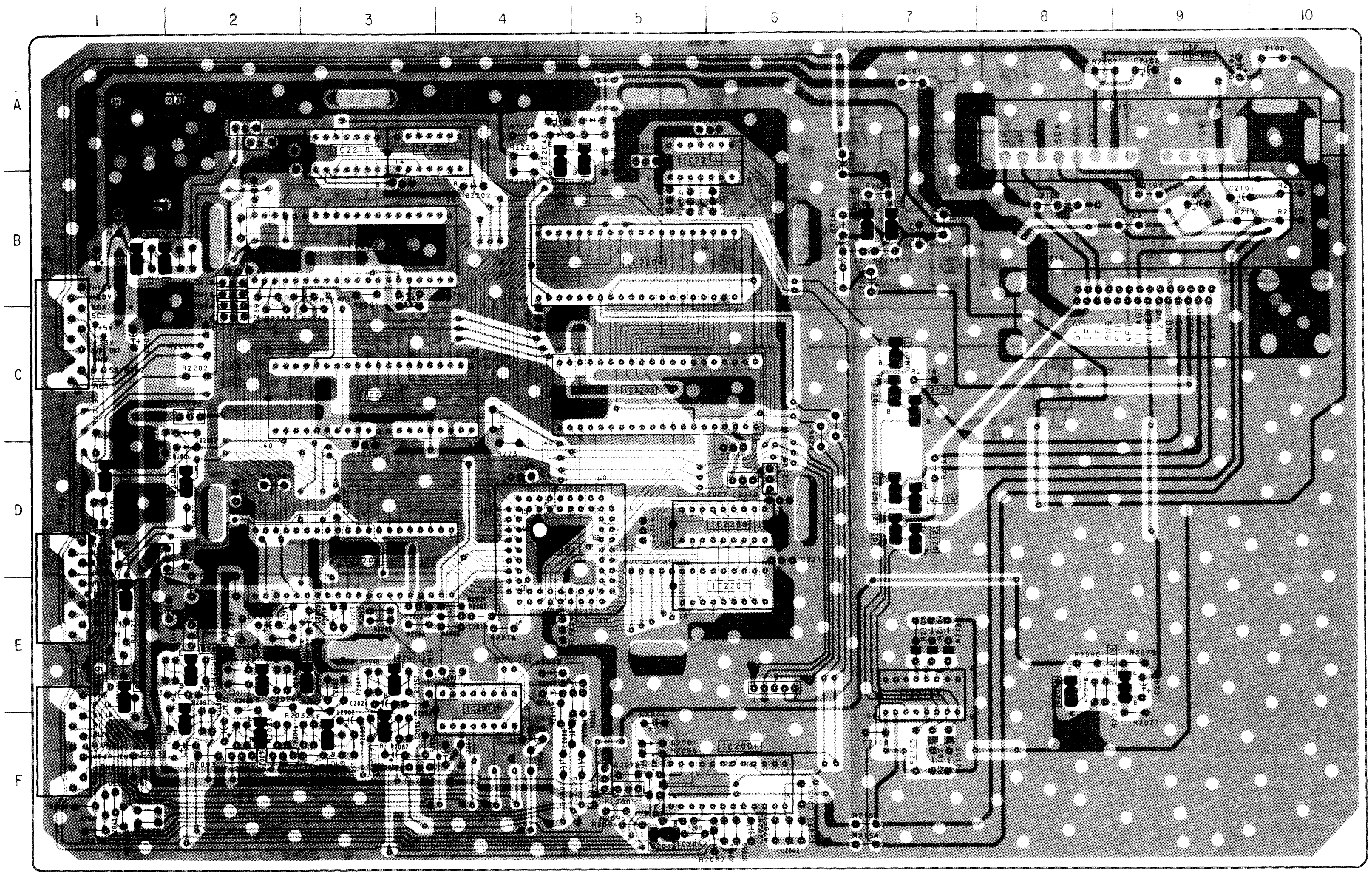


1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M N O
TUNER
TO RF BOARD
TU2101
UV-816
AGC 12V VC OUT +5V SCL SDA AS IF IF
IF-BLOCK
VIF2101
1FG-389
GND IF IF GND SIF AFT TUAGC VIDEO 12V GND PRC AUDIO SYS B1
IC2103
PCF8574
(PCF8574AP)
A0 A1 A2 B/G I D2MAC DIK M VSS VDD SDA SCL INT PRC B1 L
I²C-BUS I/O-EXPANDER
MUTE-1
MUTE-2
MUTE-3
Q2125 DTC144ES
Q2126 DTA144ES
Q2127 DTC144ES
PIP SOUND PRE-AMP-1
PIP SOUND PRE-AMP-2
Q2113 JC501
Q2114 JC501
TO K BOARD K-95
P-95 10P GREY
RES
50/60 HZ
GND
SUBS OUT
+33 V
+5 V
SCL
SDA 1 IN
20V
+12 V
L2101 3.3μH
P-96 10P GREY
+5V ST.BY
+7 V IN
PIP ENB
GND
GND
R OUT
G OUT
B OUT
BLK1 OUT
GND
TO K BOARD K-96
IC2212
TEA-5114A
RGB SWITCH
R1 IN R OUT VCC G1 IN G OUT TRI B1 IN B OUT BLK1
Q2001 DTC144ES
VIDEO AMP TV-1
VIDEO AMP TV-2
VIDEO AMP TV-3
Q2015 JA101
Q2014 JC501
Q2005 JA101
Q2013 JC501
P-97 10P GREY
V PULSE IN
SSCP
GND
VPIP IN
GND
BLK1 IN
B1 IN
G1 IN
R1 IN
GND
TO K BOARD K-97
Q2006 JC501
H SYNC
Q2007 JC501
V SYNC
Q2008 JC501
D2006 D2007 1SS133 1SS133
COMP. SYNC
PROTECT RD5.1ESB2 D2002
PROTECT RD5.1ESB2 D2003
PROTECT RD5.1ESB2 D2004
D2005 RD5.1ESB2 PROTECT
VIDEO AMP SCART-1
VIDEO AMP SCART-2
Q2009 JA101
Q2012 JC501
P
PIP ON SCREEN DISPLAY
PIP PROCESSOR, PIP CONTROLLER
VIDEO PROCESSOR, PLL
SECAM PROCESSOR, MEMORY
DEFLECTION PROCESSOR
A/D D/A CONVERTER
R G B SWITCH
FL2001–FL2012 270P 100V
LPF
+5V (A1) +5V (A2) +5V (D1) +5V (D2) +5V (D3) +5V (D4) +5V (D5) +5V (D6) +5V (C) +12V (A11) +12V (A12) +12V (A13)
OSD SWITCH-1
OSD SWITCH-2
Q2010 JC501
Q2011 JC501
Q2017 JA101
Q2018 JA101
OSD BLANKING SWITCH
Q2016 JC501
RESET ON SCREEN DISPLAY
D2001 1SS133
IC2001
CXD1050A-09P
PIP OSD
SDA SCL HD VHP OSD1 OSD2


12
13
14
15
16
17
18
19
20
21
22
20V SW-1
20V SW-2
R2222 10k
C2223 2.2 50V
R2220 22k
R2221 10k
Q2203 JC501
Q2204 JC501
FL2013 270P 100V
LPF
D2202 1SS133 RESET
C2204 0.022 F
IC2209 MDA2062
C2202 0.022 F
IC2210 MDA2062
RES
IMD
IMI
IMC
MEMORY-3
MEMORY-4
R2203 100
R2202 100
FL2018 270P 100V
FL2017 270P 100V
FL2016 270P 100V
FL2015 270P 100V
5V
5V (C)
R2240 10k
R2232 10k
R2239 10k
C2203 0.022 F
R2236 10k
R2201 10k
50/60HZ
SDA
SCL
PIP ENB
IC2202 CCU2050-0343
PIP-CONTROLER
X2203 4MHz
P-94 5P GRY-H
5 GND
4 OFF
3 IMD
2 IMI
1 IMC
+12V
+5V
D2203 1SS133 RESET
R2207 10k
R2209 1.8k
R2225 1k
Q2202 JC501
D2204 RD7.5ESB2 RESET
Q2201 JC501
RESET-2
C2205 22
R2208 10k
R2210 100
RESET-1
IC2208 μPD41464C-12
MEMORY-1
IC2207 μPD41464C-12
MEMORY-2
VIDEO AMP TV-4
Q2013 JC501
C2005 2.2
+12V (A1)
+5V (A1)
C2212 0.022
C2213 0.022
+5V (D6)
IC2211 MCU2600-56
X2201 14.3MHz
X2202 17.7MHz
PLD
PLC
CKP
PLL
+5V (D4)
C2207 0.01 F
C2209 0.01 F
C2211 3p
IC2203 PVPU2204
VIDEO PROCESSOR
C2210 0.022 F
+5V (D5)
IC2204 SPU2243
SECAM PROCESSOR
C2215 0.022 F
C2214 0.022 F
+5V (D2)
IC2201 PIP2250
PIP PROCESSOR
C2224 0.022 F
C2225 0.022 F
R2216 470
+5V (D1)
R2231 10k
C2226 0.022 F
R2217 680
IC2205 DPU2553
DEFLECTION PROCESSOR
R2218 1.8k
C2217 0.022 F
IC2206 VCU2133-60
A/D-D/A
+5V (A1)
R2226 1.8k
C2227 100
C2218 0.022 F
C2219 100
C2228 0.022 F
+12V (A1)
C2220 0.022 F
C2221 100
C2222 0.022 F
D2205 1SS133 PROTECT
R2223 270k
R2224 270k

P PIP ON SCREEN DISPLAY, PIP PROCESSOR, PIP CONTROLLER, VIDEO PROCESSOR, PLL, SECAM PROCESSOR, MEMORY, DEFLECTION PROCESSOR, A/D D/A CONVERTOR, RGB SWITCH

—P Board—



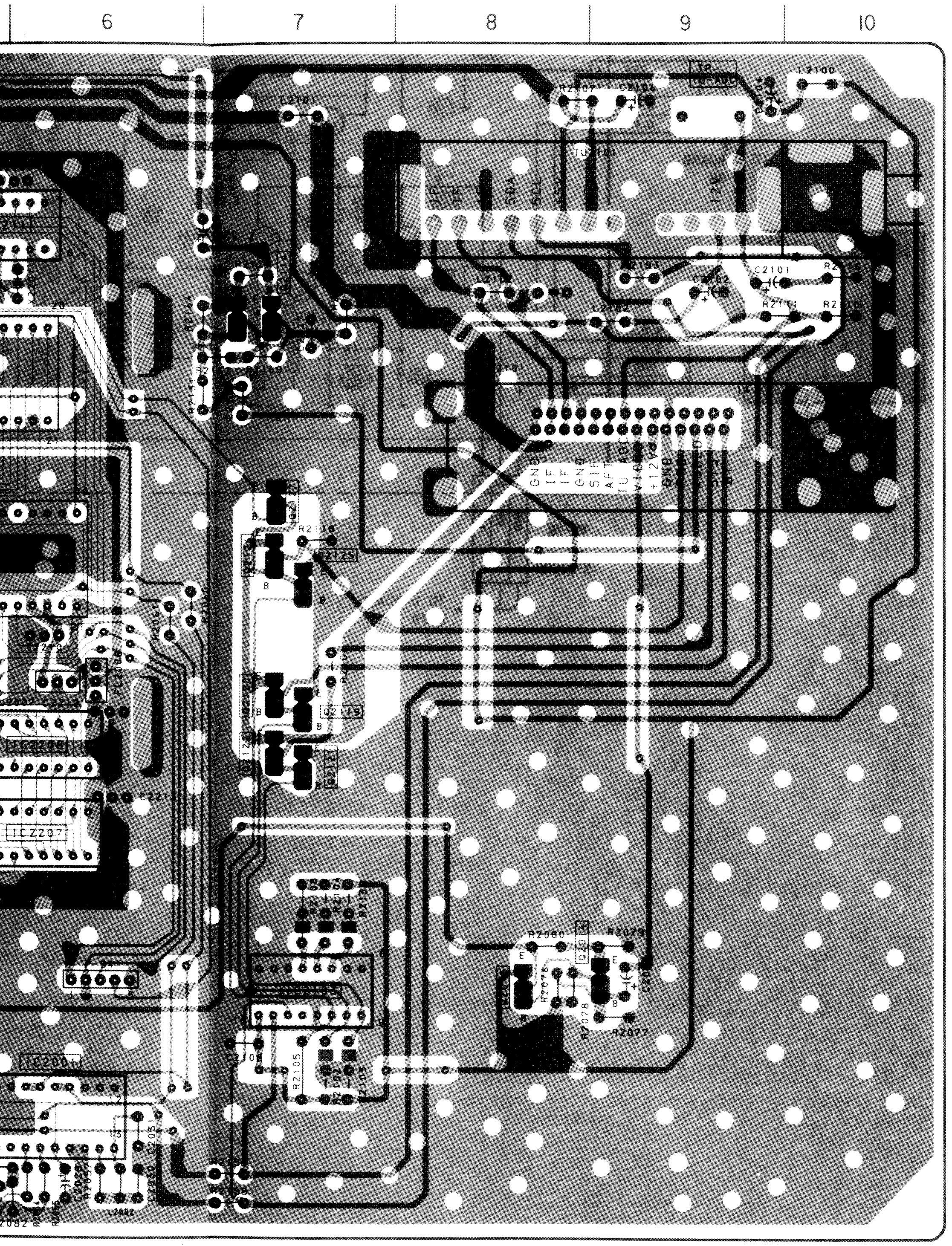
IC	
IC2001	F−6
IC2103	E−7
IC2201	D−4
IC2202	B−3
IC2203	C−5
IC2204	B−5
IC2205	C−3
IC2206	D−3
IC2207	E−6
IC2208	D−6
IC2209	A−3
IC2210	A−3
IC2211	A−5
IC2212	E−4

TRANSISTOR	
Q2001	E−1
Q2002	
Q2003	
Q2004	
Q2005	F−3
Q2006	D−1
Q2007	E−1
Q2008	D−2
Q2009	F−2
Q2010	E−2
Q2011	E−3
Q2012	E−2
Q2013	E−3
Q2014	E−9
Q2015	E−8
Q2016	F−5
Q2017	F−3
Q2018	F−2
Q2113	B−7
Q2114	B−7
Q2125	C−7
Q2126	C−7
Q2127	C−7
Q2201	B−4
Q2202	B−5
Q2203	B−1
Q2204	B−1

DIODE	
D2001	F−5
D2002	E−4
D2003	E−4
D2004	E−4
D2005	F−4
D2006	D−2
D2007	C−2
D2202	B−4
D2203	A−5
D2204	A−4
D2205	D−2

▨ : Pattern from the side which enables seeing.

■ : Pattern of the rear side.


6
7
8
9
10
L2101
L2100
R2107
C2104
TU101
R2193
C2102
C2101
R2111
Q2125
IC2207
IC2208
IC2001
R2080
R2079
R2077
R2078
C2108
L2002

▨ : Pattern from the side which enables seeing.

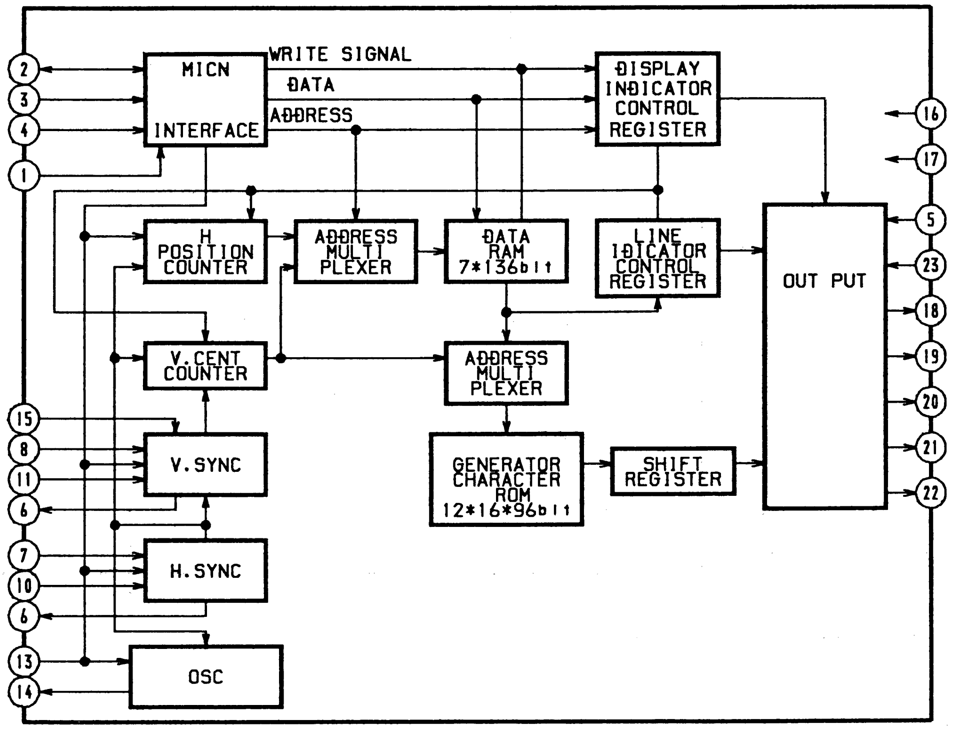
■ : Pattern of the rear side.

IC	
IC2001	F-6
IC2103	E-7
IC2201	D-4
IC2202	B-3
IC2203	C-5
IC2204	B-5
IC2205	C-3
IC2206	D-3
IC2207	E-6
IC2208	D-6
IC2209	A-3
IC2210	A-3
IC2211	A-5
IC2212	E-4

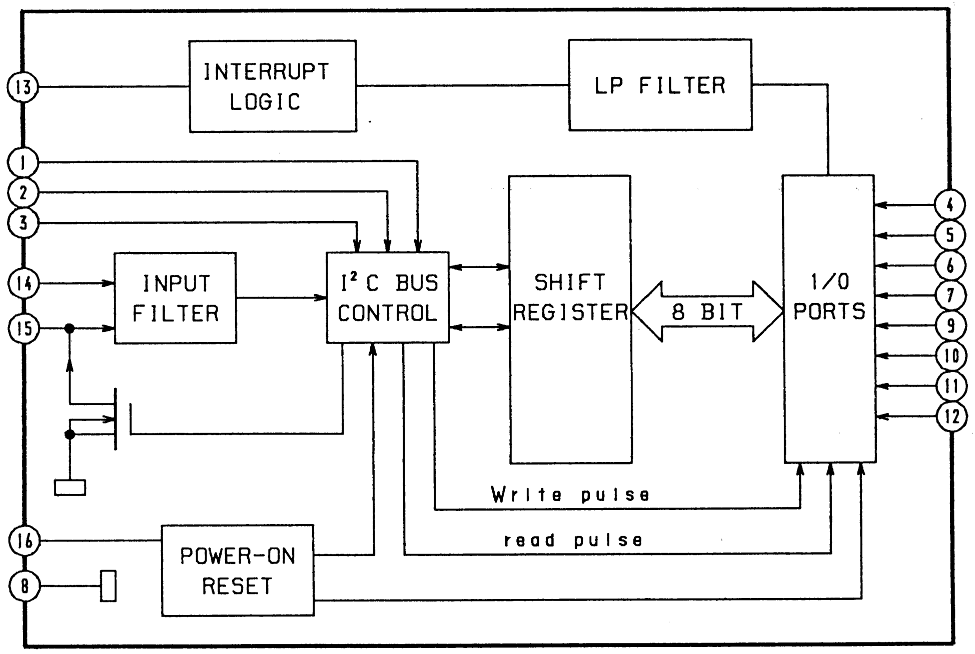
TRANSISTOR	
Q2001	E-1
Q2002	
Q2003	
Q2004	
Q2005	F-3
Q2006	D-1
Q2007	E-1
Q2008	D-2
Q2009	F-2
Q2010	E-2
Q2011	E-3
Q2012	E-2
Q2013	E-3
Q2014	E-9
Q2015	E-8
Q2016	F-5
Q2017	F-3
Q2018	F-2
Q2113	B-7
Q2114	B-7
Q2125	C-7
Q2126	C-7
Q2127	C-7
Q2201	B-4
Q2202	B-5
Q2203	B-1
Q2204	B-1

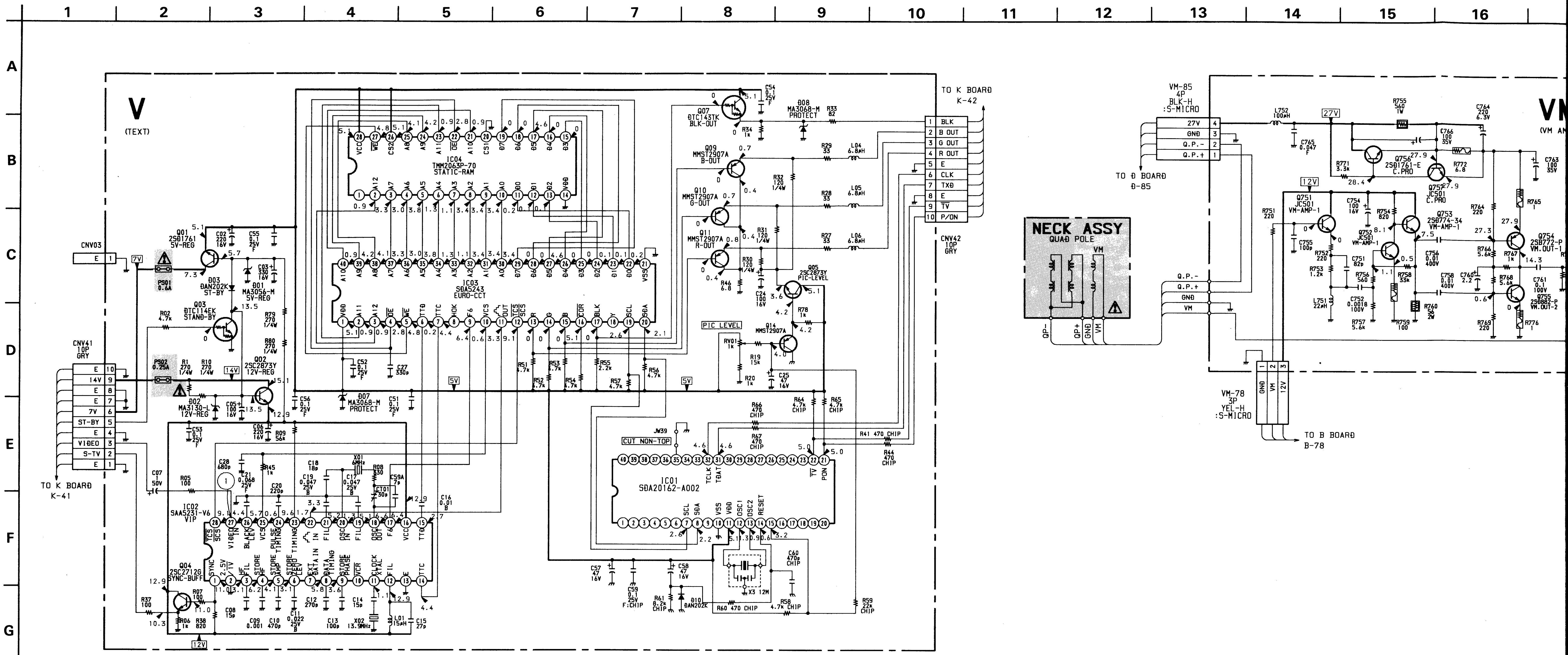
DIODE	
D2001	F-5
D2002	E-4
D2003	E-4
D2004	E-4
D2005	F-4
D2006	D-2
D2007	C-2
D2202	B-4
D2203	A-5
D2204	A-4
D2205	D-2

P BOARD IC2001 CXD1050A-09P

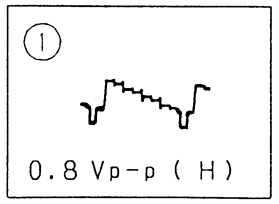

MICN
INTERFACE
WRITE SIGNAL
DATA
ADDRESS
DISPLAY INDICATOR CONTROL REGISTER
H POSITION COUNTER
ADDRESS MULTI PLEXER
DATA RAM 7*136bit
LINE INDICATOR CONTROL REGISTER
OUT PUT
V.CENT COUNTER
ADDRESS MULTI PLEXER
V.SYNC
GENERATOR CHARACTER ROM 12*16*96bit
SHIFT REGISTER
H.SYNC
OSC
1
2
3
4
5
6
6
7
8
10
11
13
14
15
16
17
18
19
20
21
22
23

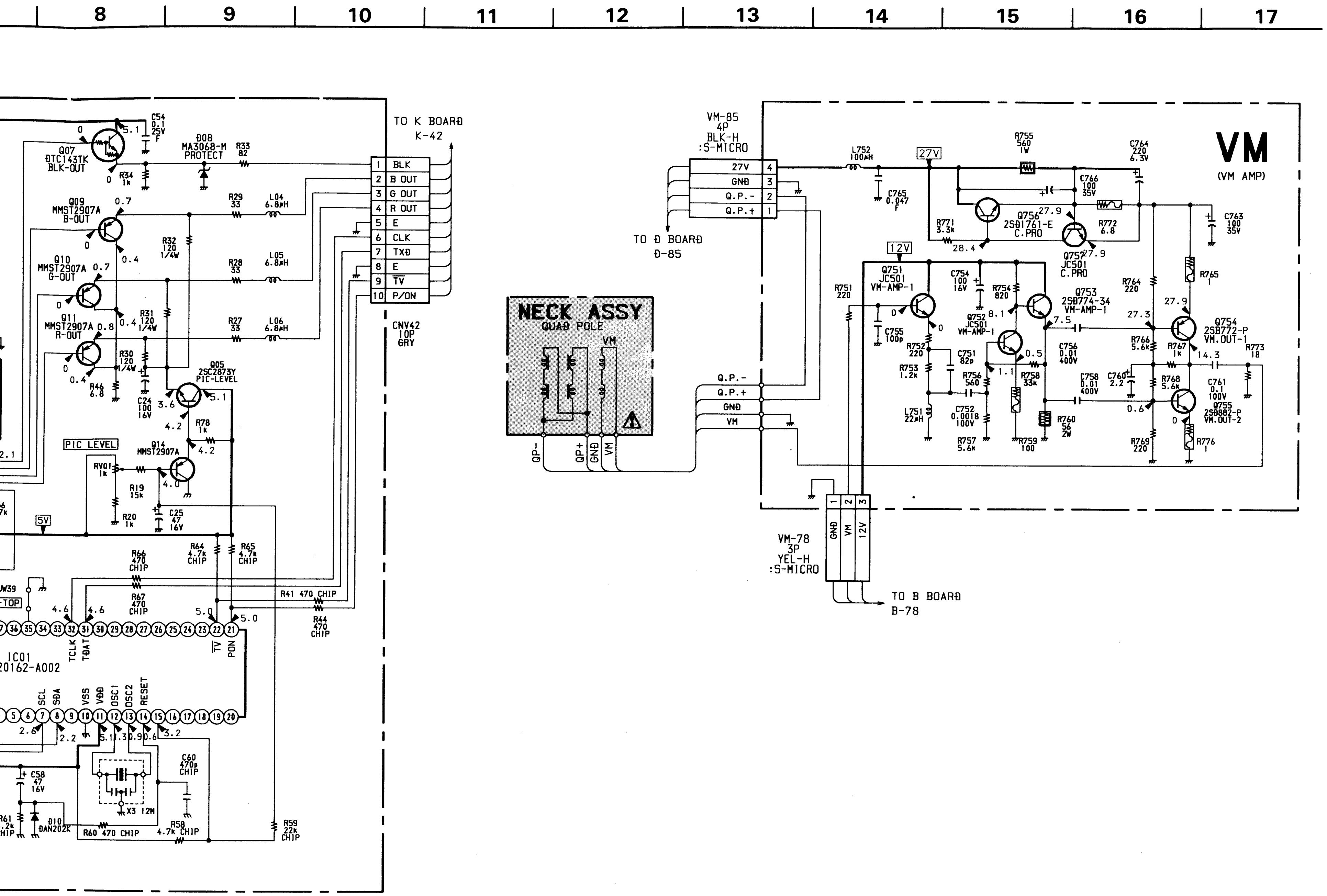
P BOARD IC2103 PCF8574


INTERRUPT LOGIC
LP FILTER
INPUT FILTER
I²C BUS CONTROL
SHIFT REGISTER
8 BIT
I/O PORTS
Write pulse
read pulse
POWER-ON RESET
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16


V
(TEXT)
IC04
TMM2063P-70
STATIC-RAM
IC03
SDA5243
EURO-CCT
IC01
SDA20162-A002
IC02
SAA5231-V6
VIP
Q01
2SD1761
5V-REG
Q02
2SC2873Y
12V-REG
Q03
DTC114EK
STAND-BY
Q04
2SC2712G
SYNC-BUFF
Q05
2SC2873Y
PIC-LEVEL
Q07
DTC143TK
BLK-OUT
Q09
MMST2907A
B-OUT
Q10
MMST2907A
G-OUT
Q11
MMST2907A
R-OUT
Q14
MMST2907A
D01
MA3056-M
5V-REG
D02
MA3130-L
12V-REG
D03
DAN202K
ST-BY
D07
MA3068-M
PROTECT
D08
MA3068-M
PROTECT
D10
DAN202K
PS01
0.6A
PS02
0.25A
CNV03
CNV41
10P
GRY
CNV42
10P
GRY
TO K BOARD
K-41
TO K BOARD
K-42
E
14V
7V
ST-BY
VIDEO
S-TV
BLK
B OUT
G OUT
R OUT
CLK
TXD
TV
P/ON
PIC LEVEL
CUT NON-TOP
X01
6MHz
X02
13.5MHz
X3 12M
RV01
1k
VM-85
4P
BLK-H
:S-MICRO
27V
GND
Q.P.-
Q.P.+
TO D BOARD
D-85
NECK ASSY
QUAD POLE
VM
QP-
QP+
GND
VM
VM-78
3P
YEL-H
:S-MICRO
12V
TO B BOARD
B-78
Q751
JC501
VM-AMP-1
Q752
JC501
VM-AMP-1
Q753
2SD774-34
VM-AMP-1
Q754
2SB772-P
VM.OUT-1
Q755
2SD882-P
VM.OUT-2
Q756
2SD1761-E
C.PRO
Q757
JC501
C.PRO
L752
100μH
R755
560
1W
VM
(VM AMP

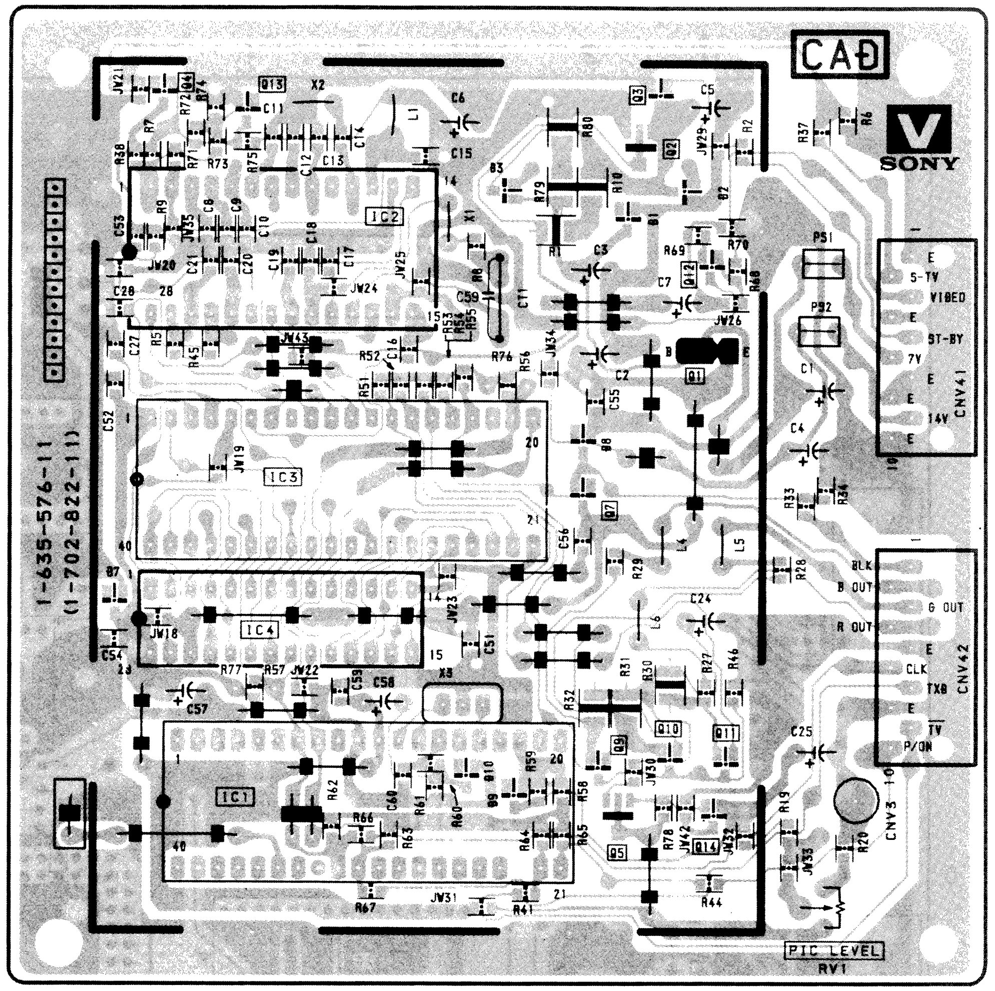
• **WAVEFORMS V BOARD**



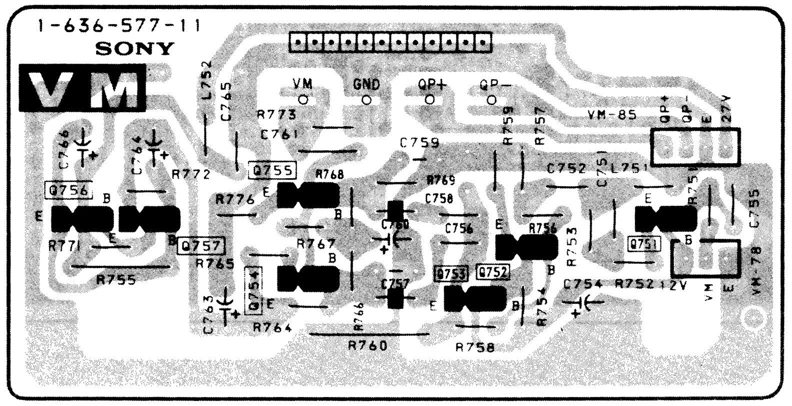

8
9
10
11
12
13
14
15
16
17
VM
(VM AMP)
TO K BOARD K-42
1 BLK
2 B OUT
3 G OUT
4 R OUT
5 E
6 CLK
7 TXD
8 E
9 TV
10 P/ON
CNV42 10P GRY
Q07 DTC143TK BLK-OUT
D08 MA3068-M PROTECT
Q09 MMST2907A B-OUT
Q10 MMST2907A G-OUT
Q11 MMST2907A R-OUT
Q05 2SC2873Y PIC-LEVEL
Q14 MMST2907A
PIC LEVEL
RV01 1k
IC01
TCLK
TDAT
SCL
SDA
VSS
VDD
OSC1
OSC2
RESET
X3 12M
D10 DAN202K
NECK ASSY
QUAD POLE
QP-
QP+
GND
VM
VM-85 4P BLK-H :S-MICRO
27V
GND
Q.P.-
Q.P.+
TO D BOARD D-85
Q751 JC501 VM-AMP-1
Q752 JC501 VM-AMP-1
Q753 2SD774-34 VM-AMP-1
Q754 2SB772-P VM.OUT-1
Q755 2SD882-P VM.OUT-2
Q756 2SD1761-E C.PRO
Q757 JC501 C.PRO
12V
27V
VM-78 3P YEL-H :S-MICRO
TO B BOARD B-78

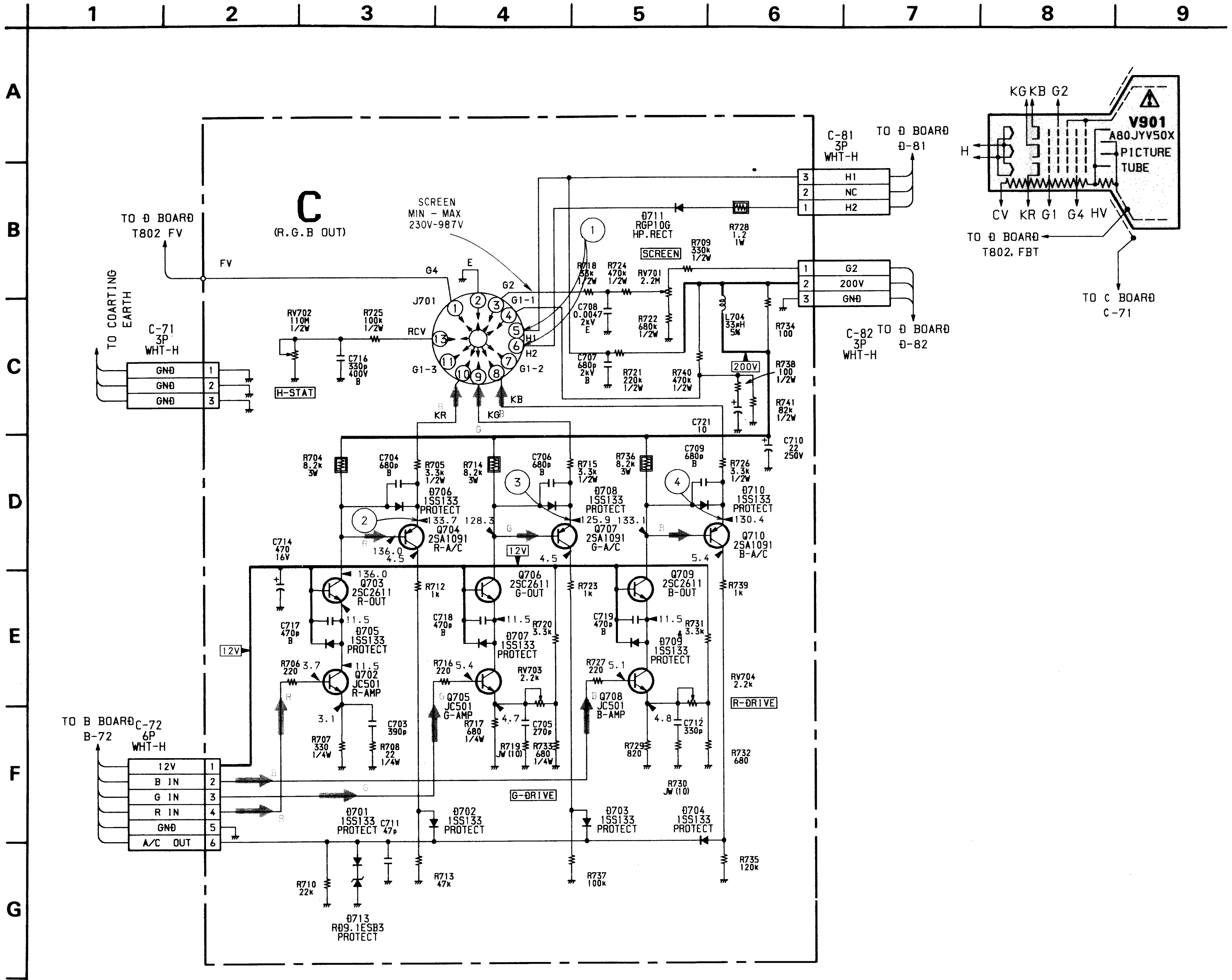
V [TEXT] VM [VM AMP]

-V Board-

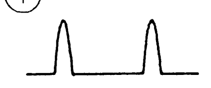
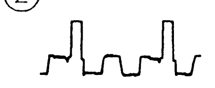
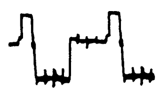
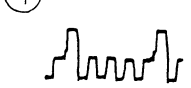

CAD
V
SONY
1-635-576-11
(1-702-822-11)
IC1
IC2
IC3
IC4
CNV41
CNV42
CNV3
PIC LEVEL
RV1

-VM Board-


1-636-577-11
SONY
VM
VM
GND
QP+
QP-
VM-85
VM-78
Q751
Q752
Q753
Q754
Q755
Q756
Q757

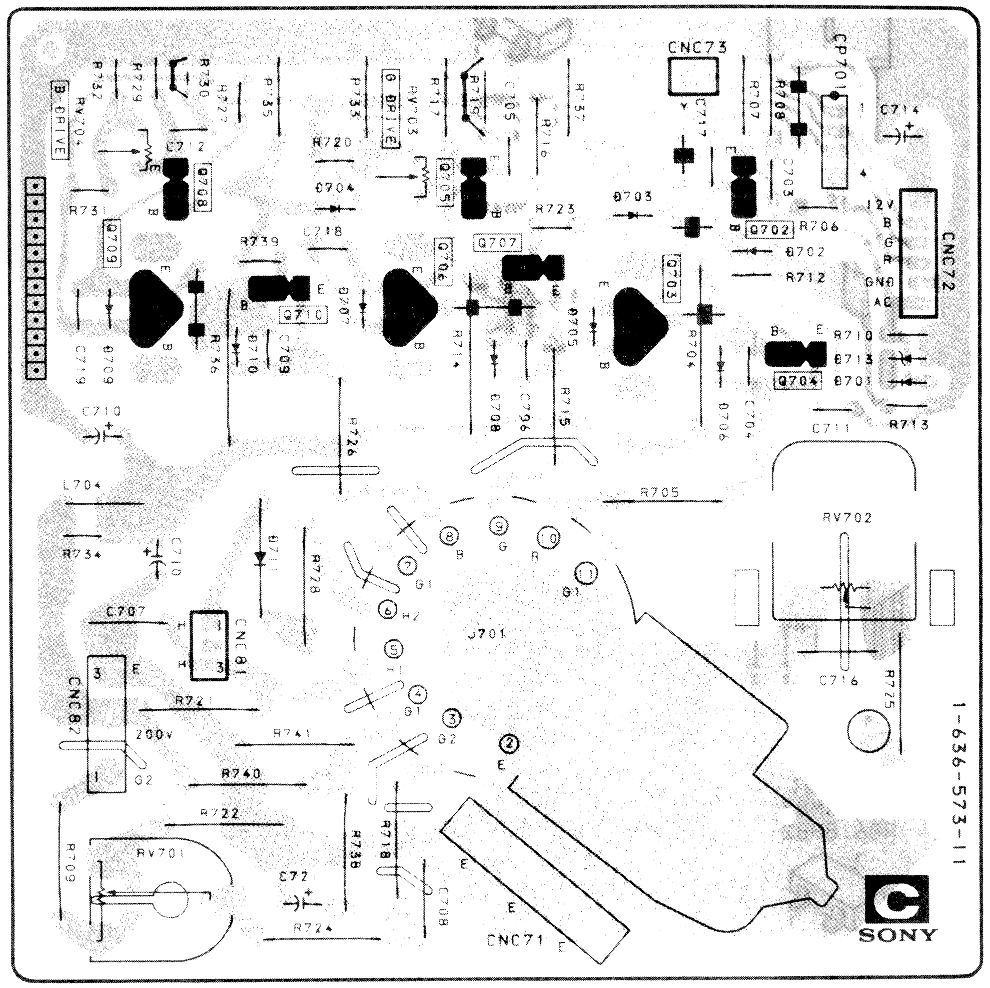

C
(R.G.B OUT)
TO D BOARD T802 FV
FV
TO COARTING EARTH
C-71 3P WHT-H
GND
GND
GND
H-STAT
RV702 110M 1/2W
R725 100k 1/2W
C716 330p 400V B
RCV
J701
G4
G2
G1-1
G1-2
G1-3
H1
H2
KR
KG
KB
SCREEN MIN – MAX 230V-987V
D711 RGP10G HP.RECT
SCREEN
R709 330k 1/2W
R728 1.2 1W
R718 56k 1/2W
R724 470k 1/2W
RV701 2.2M
C708 0.0047 2kV E
R722 680k 1/2W
L704 33mH 5W
R734 100
C707 680p 2kV B
R721 220k 1/2W
R740 470k 1/2W
200V
R738 100 1/2W
R741 82k 1/2W
C721 10
C710 22 250V
C-81 3P WHT-H
TO D BOARD D-81
H1
NC
H2
G2
200V
GND
C-82 3P WHT-H
TO D BOARD D-82
KG KB G2
V901 A80JYV50X PICTURE TUBE
H
CV KR G1 G4 HV
TO D BOARD T802. FBT
TO C BOARD C-71
R704 8.2k 3W
C704 680p B
R705 3.3k 1/2W
R714 8.2k 3W
C706 680p B
R715 3.3k 1/2W
R736 8.2k 3W
C709 680p B
R726 3.3k 1/2W
D706 1SS133 PROTECT
D708 1SS133 PROTECT
D710 1SS133 PROTECT
Q704 2SA1091 R-A/C
Q707 2SA1091 G-A/C
Q710 2SA1091 B-A/C
C714 470 16V
12V
Q703 2SC2611 R-OUT
Q706 2SC2611 G-OUT
Q709 2SC2611 B-OUT
R712 1k
R723 1k
R739 1k
C717 470p B
C718 470p B
C719 470p B
D705 1SS133 PROTECT
D707 1SS133 PROTECT
D709 1SS133 PROTECT
R720 3.3k
R731 3.3k
R706 220
Q702 JC501 R-AMP
R716 220
Q705 JC501 G-AMP
R727 220
Q708 JC501 B-AMP
RV703 2.2k
RV704 2.2k
R-DRIVE
G-DRIVE
R707 330 1/4W
R708 22 1/4W
C703 390p
R717 680 1/4W
R719 JW(10)
R733 680 1/4W
C705 270p
R729 820
R730 JW(10)
C712 330p
R732 680
TO B BOARD B-72
C-72 6P WHT-H
12V
B IN
G IN
R IN
GND
A/C OUT
D701 1SS133 PROTECT
C711 47p
D702 1SS133 PROTECT
D703 1SS133 PROTECT
D704 1SS133 PROTECT
R710 22k
R713 47k
R737 100k
R735 120k
D713 RD9.1ESB3 PROTECT
136.0
4.5
133.7
128.3
125.9
133.1
130.4
5.4
11.5
3.7
3.1
4.7
5.1
4.8
①
②
③
④

• WAVEFORMS C BOARD

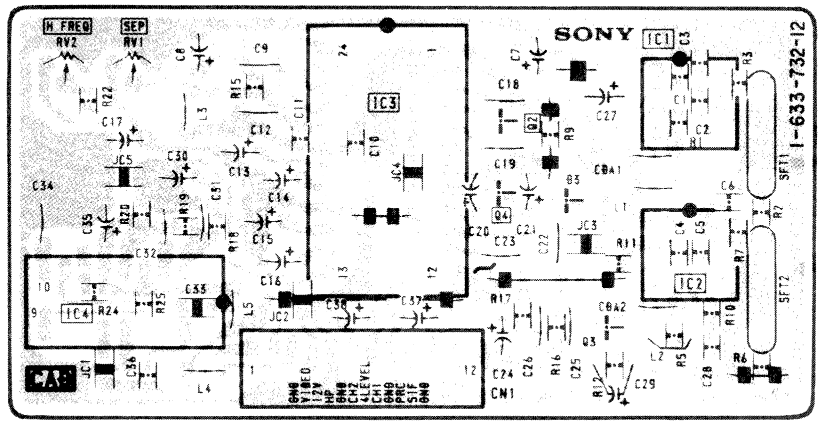
①  22 Vp-p (H)	②  110 Vp-p (H)
③  105 Vp-p (H)	④  100 Vp-p (H)

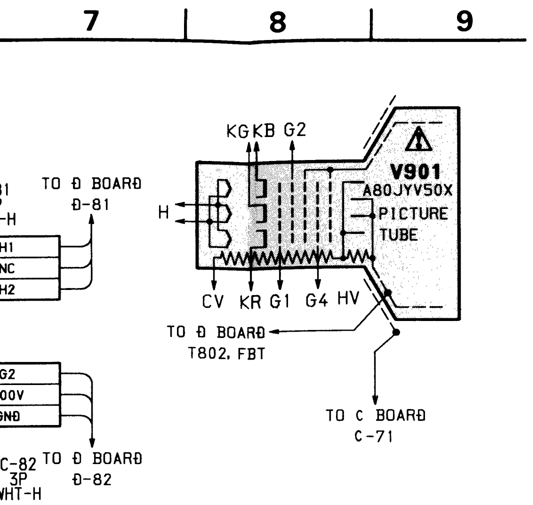
C [R·G·B OUT] IFG [SIF]

–C Board–


B-DRIVE
CNC73
CNC72
CNC71
CNC81
CNC82
J701
RV701
RV702
Q702
Q703
Q704
Q705
Q706
Q707
Q708
Q709
Q710
12V
B
G
R
GND
AC
200V
G1
G2
H1
H2
1-636-573-11
C
SONY

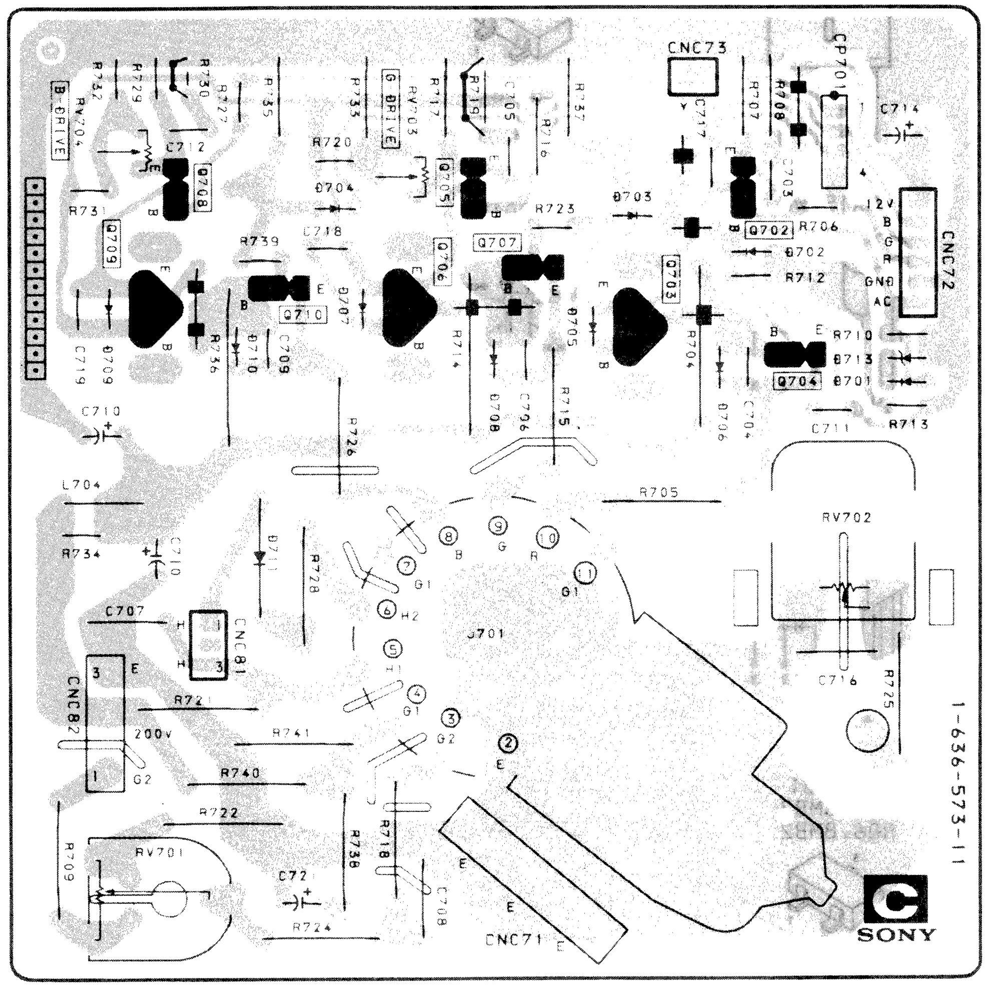
–SIF Board–


H FREQ
SEP
RV2
RV1
SONY
IC1
IC2
IC3
IC4
CN1
SFT1
SFT2
CAB
1-633-732-12

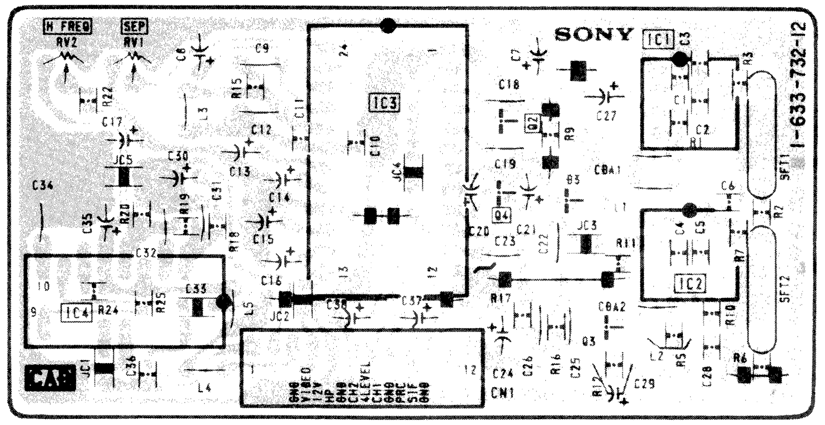

7
8
9
KG KB G2
V901
A80JYV50X
PICTURE TUBE
H
CV KR G1 G4 HV
TO Ð BOARD Ð-81
TO Ð BOARD T802, FBT
TO C BOARD C-71
TO Ð BOARD Ð-82
C-82 3P WHT-H
H1
NC
H2
G2
200V
GNÐ

C [R・G・B OUT] IFG [SIF]

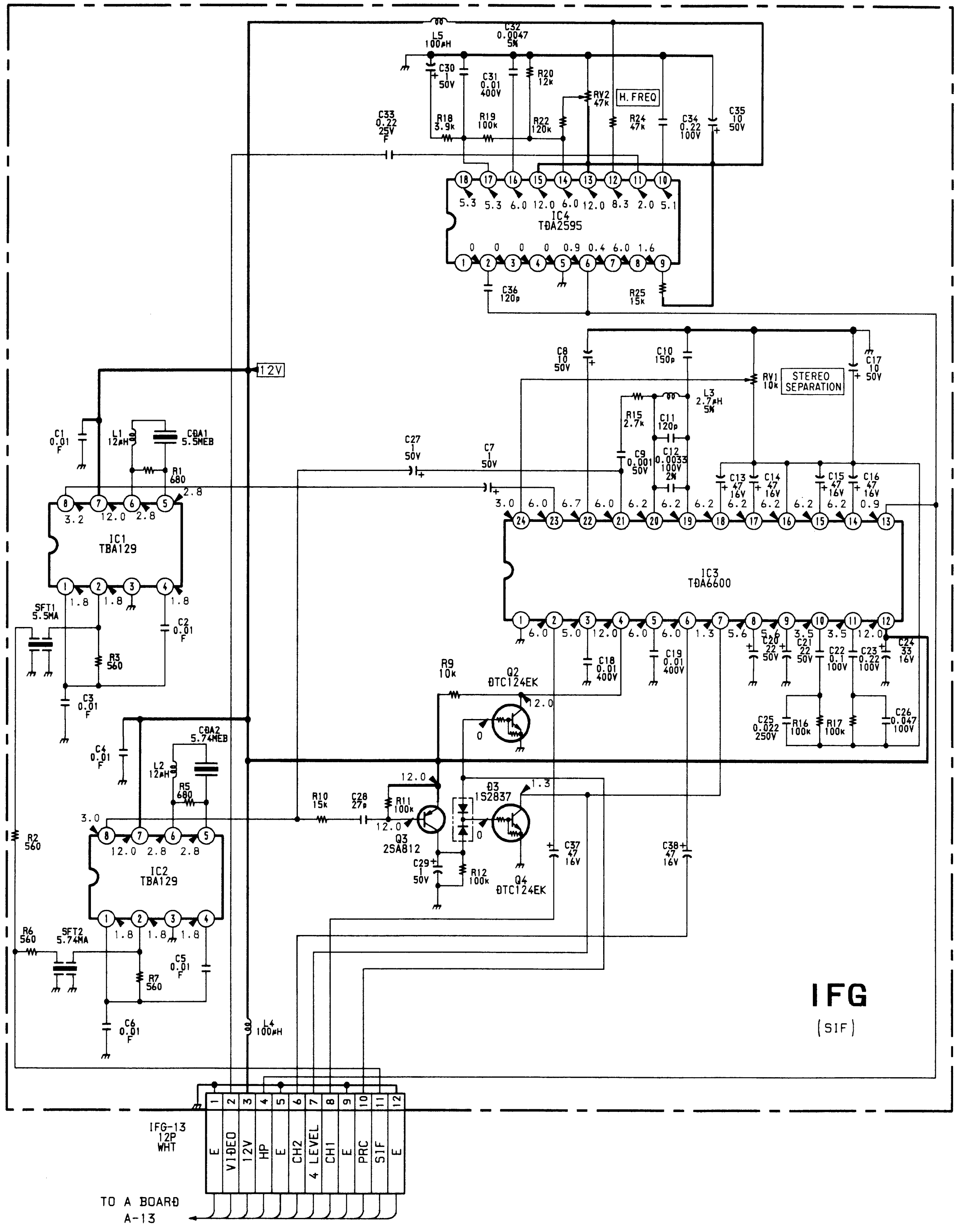
–C Board–


CNC73
CNC72
CNC71
CNC82
CNC81
CPP701
B-DRIVE
G DRIVE
Q702
Q703
Q704
Q705
Q706
Q707
Q708
Q709
Q710
RV701
RV702
V701
12V
GND
AC
200V
1-636-573-11
SONY

–SIF Board–

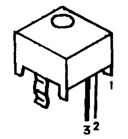

H FREQ
SEP
RV2
RV1
SONY
IC1
IC2
IC3
IC4
SFT1
SFT2
CN1
1-633-732-12
GND
VIDEO
12V
HP
GND
CH2
4LEVEL
CH1
GND
PRC
SIF
GND

SIF102 IFG5.5S

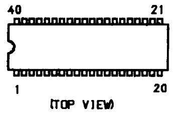

L5 100μH
C32 0.0047 5N
C30 1 50V
C31 0.01 400V
R20 12k
RV2 47k
H. FREQ
C33 0.22 25V F
R18 3.9k
R19 100k
R22 120k
R24 47k
C34 0.22 100V
C35 10 50V
IC4 TDA2595
C36 120p
R25 15k
12V
C1 0.01 F
L1 12μH
CBA1 5.5MEB
R1 680
IC1 TBA129
SFT1 5.5MA
R3 560
C2 0.01 F
C3 0.01 F
C8 10 50V
C10 150p
RV1 10k
STEREO SEPARATION
C17 10 50V
R15 2.7k
C11 120p
L3 2.7μH 5N
C27 1 50V
C7 1 50V
C9 0.001 50V
C12 0.0033 100V 2N
C13 47 16V
C14 47 16V
C15 47 16V
C16 47 16V
IC3 TDA6600
C18 0.01 400V
C19 0.01 400V
C20 22 50V
C21 22 50V
C22 0.1 100V
C23 0.22 100V
C24 33 16V
C25 0.022 250V
R16 100k
R17 100k
C26 0.047 100V
R9 10k
Q2 DTC124EK
C4 0.01 F
CBA2 5.74MEB
L2 12μH
R5 680
R10 15k
C28 27p
R11 100k
Q3 2SA812
D3 1S2837
Q4 DTC124EK
R12 100k
C29 1 50V
C37 47 16V
C38 47 16V
R2 560
IC2 TBA129
R6 560
SFT2 5.74MA
R7 560
C5 0.01 F
C6 0.01 F
L4 100μH
IFG
(SIF)
IFG-13 12P WHT
E
VIDEO
12V
HP
E
CH2
4 LEVEL
CH1
E
PRC
SIF
E
TO A BOARD A-13

5-4. SEMICONDUCTORS

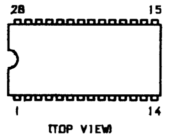
BX1387
SBX1483-11



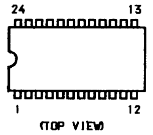
CCU2050-D343
DPU2553
MDA2062
PVPU2204
SAA5243P/E-M2
SDA20560-D343
SDA5243
SPU2243
VCU2133-60


40
21
1
20
(TOP VIEW)

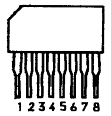
CXA1114P
SAA5231-V6
TDA4580-V4
TDA4650
TDA6200
TEA2028B
TMM2063P-70


28
15
1
14
(TOP VIEW)

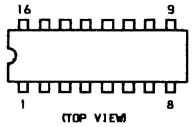
CXD1050A-09P


24
13
1
12
(TOP VIEW)

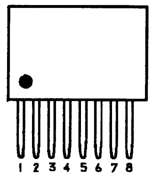
CX20061



HCF4052BEY
MC14053BCP
PCF8574
TC4051BPHB
TC4052BPHB
TDA4660
TDA8442N3
TEA5114A


16
9
1
8
(TOP VIEW)

HIC2110



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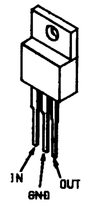
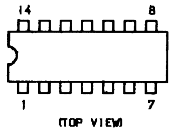
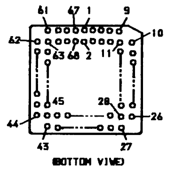
RC7812FA



MCU2600-56


14
8
1
7
(TOP VIEW)

PIP2250


(BOTTOM VIEW)

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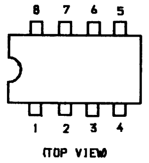
SDA2546
TDA2822M
TEA2014A
TEA2031A
μPC393C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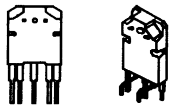
1 2 3 4
(TOP VIEW)

STR90120



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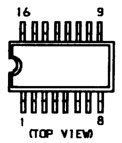
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9
1
8
(TOP VIEW)

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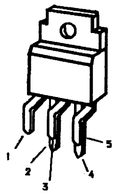

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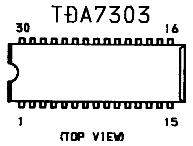
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16
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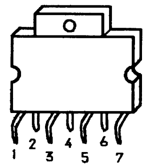
15
(TOP VIEW)

TDA8170



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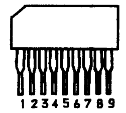

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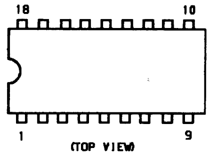
18
10
1
9
(TOP VIEW)

DTA144EK
DTC114EK
DTC124EK
DTC143TK
DTC144EK
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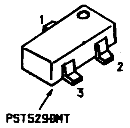
2SA1162-G
2SB1295-UL6
2SC2412K-QR
2SC2712-G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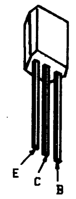
PST5298MT

DTC114ES
DTC144ES



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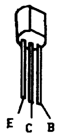
2SA1091-O



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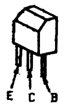
2SB734-34
2SC2958-L
2SD774-34



2SB772-Q
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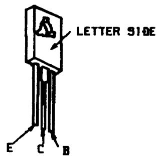
2SC2688-LK
2SD882-P


LETTER SIDE
E C B

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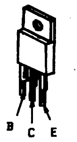
2SC4159-E
2SD795A-P
2SD1585-K



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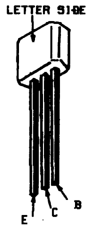
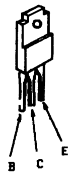

LETTER SIDE
E C B

2SC3298B-O



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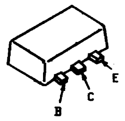
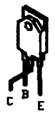
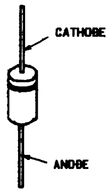


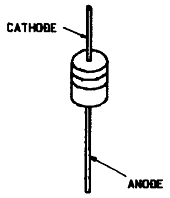
2SD1941-07



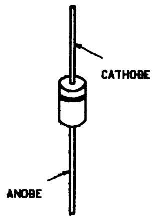
EGP20G
10E-2


CATHODE
ANODE

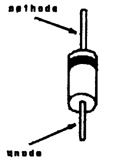
ERA83-006
RD10ES-B3
RD11ES-B3
RD13ES-B2
RD20ES-B3
RD33ES-B1
RD4.7ES-B2
RD5.1ES-B2
RD5.6ES-B2
RD5.6ES-B3
RD6.2ES-B2
RD6.8ES-B3
RD7.5ES-B2
RD7.5ES-B3
ED9.1ES-B3
1SS119


CATHODE
ANODE

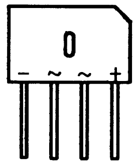
ERC06-15S
RU-3AM


CATHODE
ANODE

ERD29-08J


cathode
anode

KBU4JL-6088



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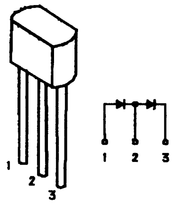
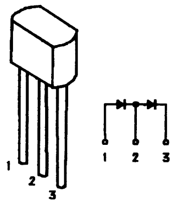
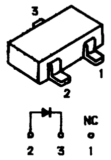


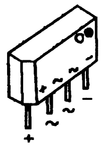
MC932



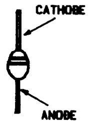
RD13MB1
RD5.6MB2
RD6.8MB2



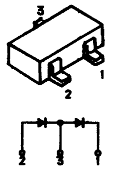
S1VB40



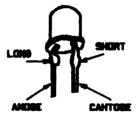
U05G
V11N


CATHODE
ANODE

1SS226



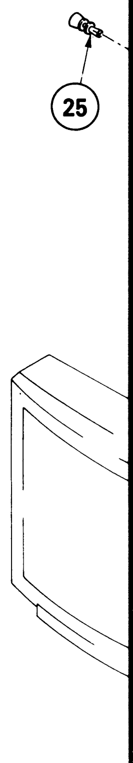
LD-201VR


LONG
SHORT
ANODE
CATHODE

NOTE:
- Items with no
cription are
are seldom re
- The construct
part are ind
number in the
- Items marked
they are se
service. Some
when ordering

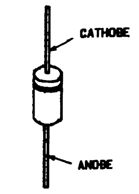
6-1. CHASSIS

● : BVTP3×12
○ : BVTP4×12
□ : BVTP4×20

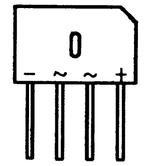


REF.NO.	PART NO.
1	*4-381-6
2	*4-374-9
3	*1-636-5
4	*1-636-5
5	4-386-6
6	*1-636-5
7	⚠1-571-4
8	⚠4-389-2
9	⚠1-575-4
10	*1-636-5
11	*3-701-8
12	*A-1642-
13	⚠1-439-4
14	*1-558-5
15	⚠1-563-2
16	⚠1-417-1

EGP20G
10E-2



KBU4JL-6088



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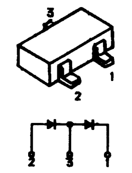
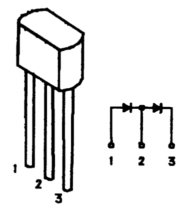
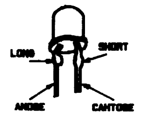


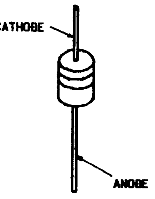
MA152WK



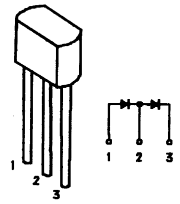
LD-201VR



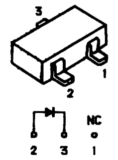
ERA83-006
RD10ES-B3
RD11ES-B3
RD13ES-B2
RD20ES-B3
RD33ES-B1
RD4.7ES-B2
RD5.1ES-B2
RD5.6ES-B2
RD5.6ES-B3
RD6.2ES-B2
RD6.8ES-B3
RD7.5ES-B2
RD7.5ES-B3
ED9.1ES-B3
1SS119



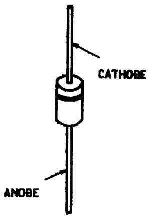
MC932



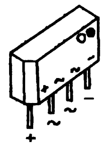
RD13MB1
RD5.6MB2
RD6.8MB2



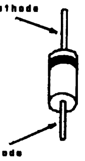
ERC06-15S
RU-3AM



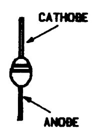
S1VB40



ERD29-08J



U05G
V11N



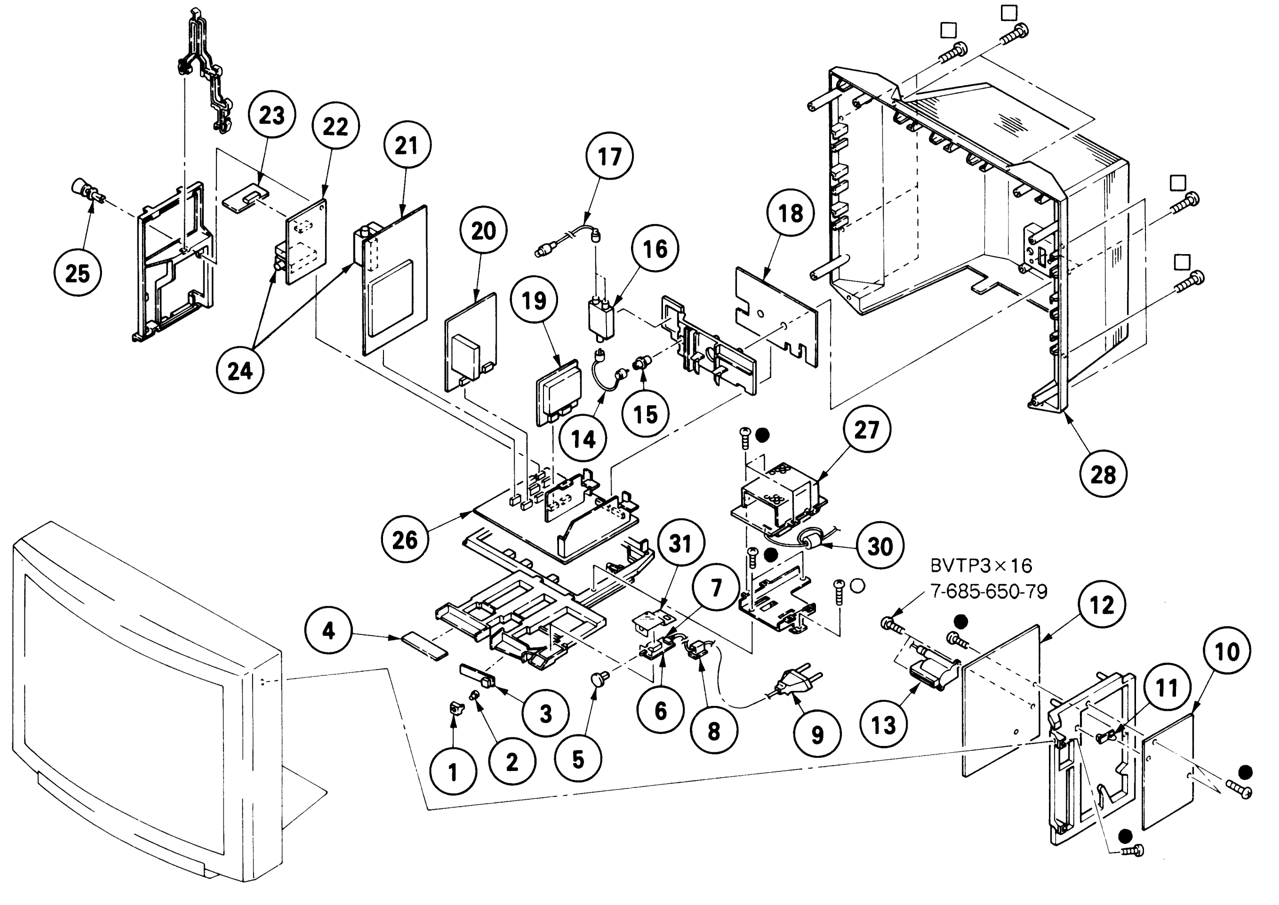
SECTION 6
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. CHASSIS

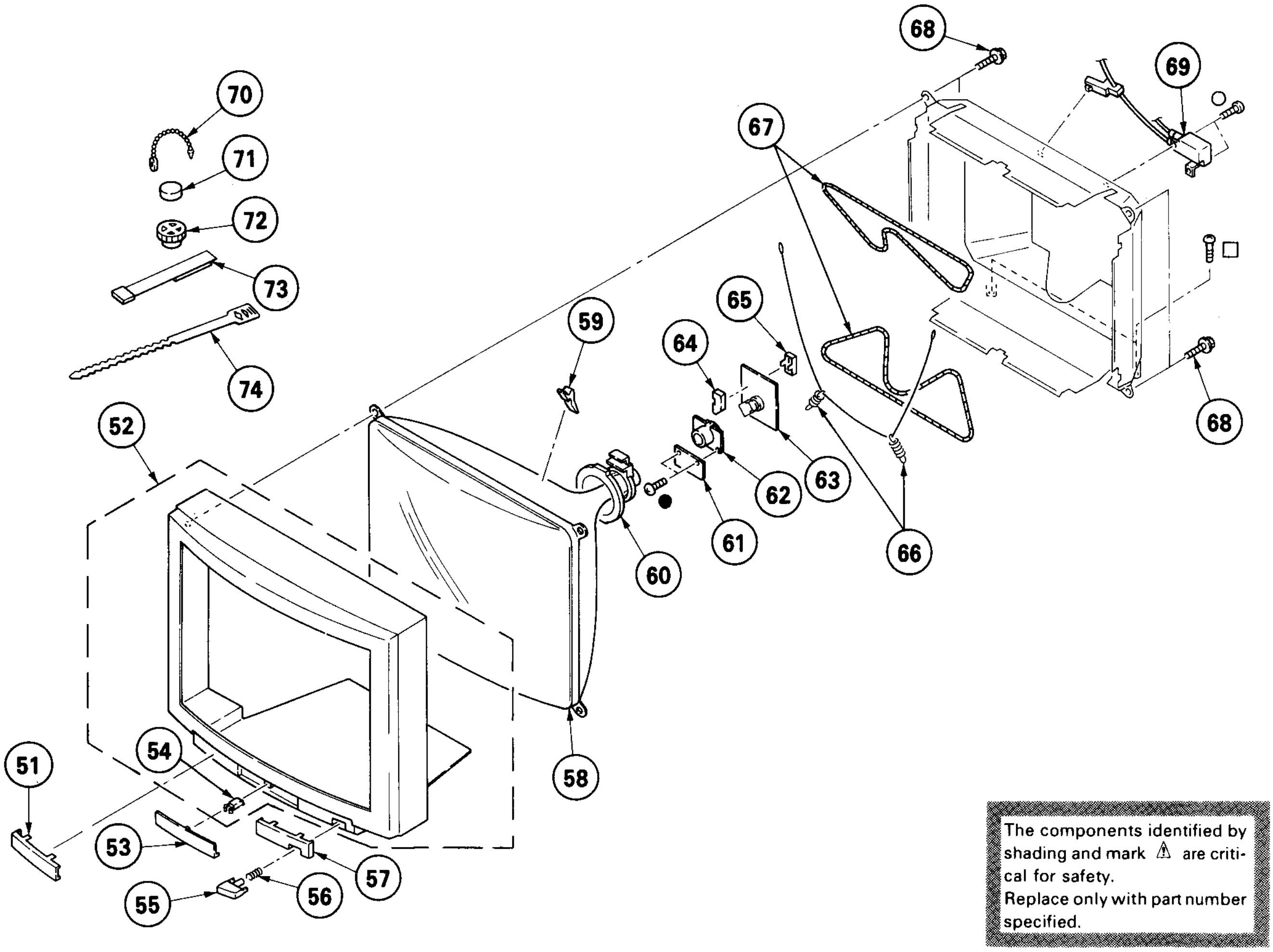
● : BVTP3×12 7-685-648-79
○ : BVTP4×12 7-685-661-14
□ : BVTP4×20 7-685-664-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	*4-381-686-01	BRACKET (B), LIGHT GUIDE	
2	*4-374-987-01	GUIDE, LIGHT	
3	*1-636-576-11	H2 BOARD	
4	*1-636-575-11	H1 BOARD	
5	4-386-611-01	COVER, SWITCH	
6	*1-636-574-11	F2 BOARD	
7	⚠.1-571-433-11	SWITCH, PUSH (AC POWER)	
8	⚠.4-389-201-02	HOLDER, AC CORD	
9	⚠.1-575-487-11	CORD, POWER (WITH NOISE FILTER)	
10	*1-636-582-11	F1 BOARD	
11	*3-701-832-00	HINGE, CIRCUIT BOARD	
12	*A-1642-025-A	D BOARD, COMPLETE	
13	⚠ 1-439-418-21	TRANSFORMER ASSY, FLYBACK (UX-1610)	
14	*1-558-539-21	CABLE, P-P	
15	⚠ 1-563-204-13	SOCKET, ANTENNA (PAL/SECAM)	
16	⚠ 1-417-175-12	RF SPLITTER	
17	1-590-127-11	CABLE, PIN	
18	*A-1651-013-A	J BOARD, COMPLETE	
19	*A-1645-009-A	V BOARD, COMPLETE	
20	*A-1621-009-A	B BOARD, COMPLETE	
21	*A-1623-001-A	P BOARD, COMPLETE	
22	*A-1632-015-A	A BOARD, COMPLETE	23
23	1-464-964-21	SIF BOARD (IF BLOCK IFG-5.5S)	
24	⚠ 1-465-301-11	TUNER, ET (UV-816(PLL))	
25	4-386-618-01	RIVET, T TYPE	
26	*A-1649-001-A	K BOARD, COMPLETE	
27	⚠ 1-413-583-11	G BOARD (ZD-113)	
28	X-4200-053-1	COVER ASSY, REAR	
30	1-543-619-11	CORE, RING	
31	4-200-274-21	COVER, POWER SWITCH	

6-2. PICTURE TUBE

● : BVTP3×12 7-685-648-79
○ : BVTP4×12 7-685-661-14
□ : BVTP4×20 7-685-664-79



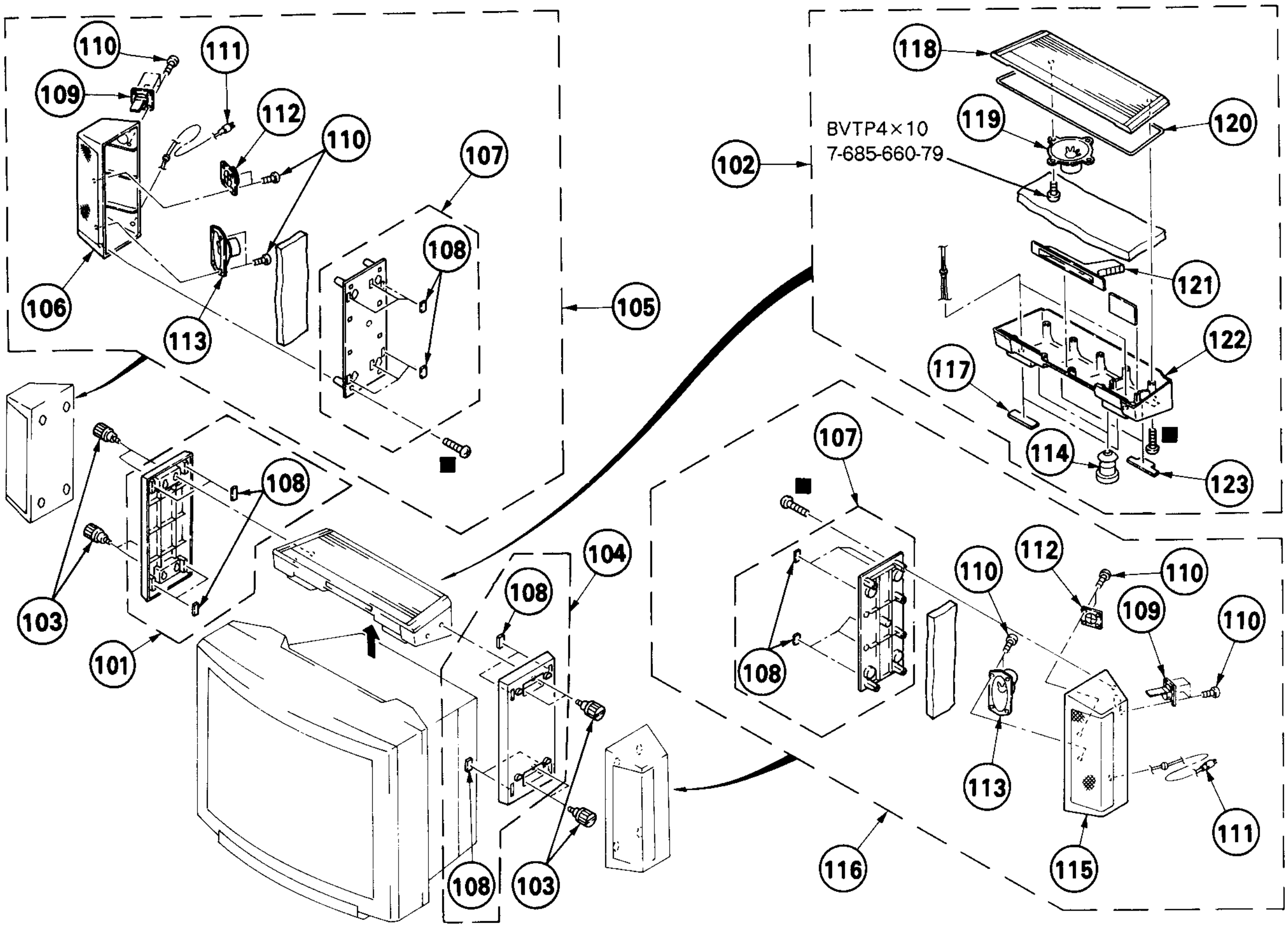
The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
51	4-200-435-01	PLATE, ORNAMENTAL	
52	X-4200-052-1	CABINET ASSY (WITH BEZEL ASSY)	54
53	4-200-445-01	DOOR	
54	4-392-036-01	CATCHER, PUSH	
55	4-200-444-01	BUTTON, POWER	
56	4-329-112-21	SPRING	
57	4-200-443-01	WINDOW, ORNAMENTAL	
58	⚠ 8-733-723-05	PICTURE TUBE (A80JYV50X)	
59	3-704-495-01	SPACER, DY	
60	⚠ 1-451-315-11	DEFLECTION YOKE (Y34FXA)	
61	*1-636-577-11	VM BOARD	
62	⚠ 1-452-468-11	NECK ASSY, PICTURE TUBE (NA321)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
63	*A-1638-010-A	C BOARD, COMPLETE	
64	*4-379-167-01	COVER (MAIN), CV	
65	*4-379-160-01	COVER (REAR LID), CV	
66	*4-376-036-01	SPRING, TENSION	
67	⚠ 1-426-433-21	COIL, DEMAGNETIZATION	
68	4-373-263-11	SCREW (M), PT	
69	⚠ 1-237-614-12	RESISTOR ASSY, HIGH-VOLTAGE	
70	4-308-870-00	CLIP, LEAD WIRE	
71	1-452-032-00	MAGNET, DISK; 10MM ϕ	
72	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
73	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
74	3-701-007-00	BAND, BINDING	

6-3. SPEAKER

■ : BVTP4×16 7-685-663-79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REF.NO.	PART NO.	DESCRIPTION	REMARK
101	X-4200-061-1	SPACER ASSY, SIDE(L)	108
102	A-1678-025-A	BOX COMPLETE ASSY, WOOFER	114, 117-123
103	X-4374-104-1	SCREW (B) ASSY, ORNAMENTAL	
104	X-4200-060-1	SPACER ASSY, SIDE(R)	108
105	*A-1678-024-A	BOX ASSY (LEFT), SPEAKER	106-113
106	X-4200-057-1	BOX ASSY, SIDE (L)	
107	X-4200-056-1	BOTTOM ASSY, SIDE	108
108	4-200-006-11	CUSHION, FOOT	
109	1-236-510-21	NETWORK, DIVIDING	
110	4-364-802-00	SCREW (3.5X13)	
111	1-575-024-11	CORD, SPEAKER (WITH PLUG)	
112	1-544-203-11	SPEAKER	
113	1-544-204-11	SPEAKER	
114	1-236-960-11	NETWORK, DIVIDING	
115	X-4200-054-1	BOX ASSY, SIDE (R)	
116	*A-1678-023-A	BOX ASSY (RIGHT), SPEAKER	107-113, 115
117	4-200-473-01	CUSHION, FOOT (B)	
118	4-200-469-01	BOARD, BAFFLE, WOOFER	
119	1-544-192-11	SPEAKER	
120	4-200-471-01	GASKET	
121	*4-200-470-01	TUBE, BASS REFLEX	
122	X-4200-059-1	BOX ASSY, WOOFER	
123	4-200-472-01	CUSHION, FOOT (A)	

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : mH, UH : μH

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1621-009-A	B BOARD, COMPLETE *****************			
	*1-508-784-00	PIN, CONNECTOR (5MM PITCH 1P)			
	*1-564-518-11	PLUG, CONNECTOR 3P			
	*1-564-521-11	PLUG, CONNECTOR 6P			
	*1-565-393-11	CONNECTOR, BOARD TO BOARD			
		<CAPACITOR>			
C301	1-106-228-00	MYLAR	0.22MF	10%	100V
C302	1-106-228-00	MYLAR	0.22MF	10%	100V
C303	1-124-122-11	ELECT	100MF	20%	50V
C304	1-106-228-00	MYLAR	0.22MF	10%	100V
C305	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C306	1-124-902-00	ELECT	0.47MF	20%	50V
C307	1-124-902-00	ELECT	0.47MF	20%	50V
C308	1-124-902-00	ELECT	0.47MF	20%	50V
C309	1-124-902-00	ELECT	0.47MF	20%	50V
C310	1-106-220-00	MYLAR	0.1MF	10%	100V
C311	1-106-220-00	MYLAR	0.1MF	10%	100V
C312	1-124-902-00	ELECT	0.47MF	20%	50V
C313	1-124-902-00	ELECT	0.47MF	20%	50V
C314	1-124-902-00	ELECT	0.47MF	20%	50V
C315	1-124-791-11	ELECT	1MF	20%	50V
C316	1-124-927-11	ELECT	4.7MF	20%	50V
C317	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C318	1-124-927-11	ELECT	4.7MF	20%	50V
C319	1-124-927-11	ELECT	4.7MF	20%	50V
C320	1-124-910-11	ELECT	47MF	20%	50V
C321	1-124-791-11	ELECT	1MF	20%	50V
C322	1-163-077-00	CERAMIC CHIP	0.1MF		50V
C323	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C324	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C325	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C326	1-124-910-11	ELECT	47MF	20%	50V
C327	1-124-910-11	ELECT	47MF	20%	50V
C328	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C329	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C330	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C331	1-106-220-00	MYLAR	0.1MF	10%	100V
C332	1-106-220-00	MYLAR	0.1MF	10%	100V
C333	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C334	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C335	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C336	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C337	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C338	1-106-375-12	MYLAR	0.022MF	10%	250V
C339	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C340	1-126-103-11	ELECT	470MF	20%	16V
C341	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C342	1-124-791-11	ELECT	1MF	20%	50V
C343	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C344	1-124-791-11	ELECT	1MF	20%	50V
C345	1-106-383-00	MYLAR	0.047MF	10%	100V
C346	1-130-783-00	MYLAR	0.33MF	10%	100V
C347	1-106-220-00	MYLAR	0.1MF	10%	100V
C348	1-106-375-12	MYLAR	0.022MF	10%	250V
C349	1-106-375-12	MYLAR	0.022MF	10%	250V
C350	1-124-927-11	ELECT	4.7MF	20%	50V
C351	1-106-375-12	MYLAR	0.022MF	10%	250V
C352	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C353	1-126-101-11	ELECT	100MF	20%	16V
C354	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C356	1-126-101-11	ELECT	100MF	20%	16V
C357	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C358	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C359	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C360	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C361	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C363	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C365	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C367	1-102-963-00	CERAMIC	33PF	5%	50V
C370	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C371	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C372	1-124-477-11	ELECT	47MF	20%	16V
C373	1-124-477-11	ELECT	47MF	20%	16V
C374	1-163-090-00	CERAMIC CHIP	7PF	0.25PF	50V
C375	1-163-090-00	CERAMIC CHIP	7PF	0.25PF	50V
C376	1-124-963-11	ELECT	33MF	20%	16V
C377	1-124-119-00	ELECT	330MF	20%	16V
C378	1-124-963-11	ELECT	33MF	20%	16V
C379	1-163-090-00	CERAMIC CHIP	7PF	0.25PF	50V
C380	1-163-090-00	CERAMIC CHIP	7PF	0.25PF	50V
C381	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C382	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C383	1-163-197-00	CERAMIC CHIP	470PF	5%	50V
C384	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C385	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C386	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C387	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C388	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C389	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C1301	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C1302	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
		<TRIMMER>			
CT301	1-141-392-11	CAP, VAR, TRIMMER (1 GANG)			
CT302	1-141-392-11	CAP, VAR, TRIMMER (1 GANG)			

B

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D304	8-719-911-19	DIODE 1SS119	
D305	8-719-911-19	DIODE 1SS119	
D306	8-719-980-78	DIODE ERA83-006	
D307	8-719-110-23	DIODE RD11ES-B3	
D309	8-719-911-19	DIODE 1SS119	
D310	8-719-110-23	DIODE RD11ES-B3	
D311	8-719-110-23	DIODE RD11ES-B3	
D312	8-719-110-23	DIODE RD11ES-B3	
D313	8-719-911-19	DIODE 1SS119	
D314	8-719-911-19	DIODE 1SS119	
D315	8-719-911-19	DIODE 1SS119	
D316	8-719-911-19	DIODE 1SS119	
D317	8-719-911-19	DIODE 1SS119	
D318	8-719-911-19	DIODE 1SS119	
D319	8-719-911-19	DIODE 1SS119	
D320	8-719-911-19	DIODE 1SS119	
D321	8-719-109-90	DIODE RD5.6ES-B3	
D322	8-719-911-19	DIODE 1SS119	
D323	8-719-911-19	DIODE 1SS119	
D324	8-719-800-76	DIODE 1SS226	
D325	8-719-800-76	DIODE 1SS226	
D326	8-719-800-76	DIODE 1SS226	
D327	8-719-911-19	DIODE 1SS119	
D329	8-719-109-62	DIODE RD3.0ES-B1	
D330	8-719-911-19	DIODE 1SS119	
D331	8-719-911-19	DIODE 1SS119	
D332	8-719-911-19	DIODE 1SS119	
D333	8-719-911-19	DIODE 1SS119	
D334	8-719-911-19	DIODE 1SS119	
D335	8-719-911-19	DIODE 1SS119	
D336	8-719-911-19	DIODE 1SS119	
D337	8-719-911-19	DIODE 1SS119	
D338	8-719-911-19	DIODE 1SS119	
D339	8-719-911-19	DIODE 1SS119	

<DELAY LINE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
DL301	1-415-613-11	DELAY LINE, Y	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC301	8-759-503-41	IC TDA4580-V6	
IC302	8-759-980-60	IC TDA8442N3	
IC303	8-759-990-30	IC TDA4660	
IC304	8-759-990-29	IC TDA4650	
IC306	8-759-501-49	IC HCF4052BEY	
IC308	8-752-006-12	IC CX20061	
IC1301	1-235-534-11	CONTROL MODULE, PICTURE	
IC1312	8-741-650-21	IC SBX1650-21	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L301	1-410-868-11	INDUCTOR	4.7UH	
L303	1-404-554-11	COIL		
L304	1-410-868-11	INDUCTOR	4.7UH	
L305	1-408-402-00	INDUCTOR	2.7UH	
L306	1-410-868-11	INDUCTOR	4.7UH	
L308	1-404-495-00	COIL		
L309	1-408-415-00	INDUCTOR	33UH	
L310	1-408-419-00	INDUCTOR	68UH	
L312	1-404-495-00	COIL		
L313	1-404-554-11	COIL		
L314	1-408-409-00	INDUCTOR	10UH	
L315	1-410-868-11	INDUCTOR	4.7UH	
L316	1-408-397-00	INDUCTOR	1UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q301	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q302	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q303	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q305	8-729-901-06	TRANSISTOR DTA144EK	
Q306	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q307	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q308	8-729-901-00	TRANSISTOR DTC124EK	
Q309	8-729-901-00	TRANSISTOR DTC124EK	
Q310	8-729-901-00	TRANSISTOR DTC124EK	
Q311	8-729-901-00	TRANSISTOR DTC124EK	
Q312	8-729-216-22	TRANSISTOR 2SA1162-G	
Q313	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q320	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q321	8-729-920-71	TRANSISTOR 2SA1037K-QR	
Q322	8-729-216-22	TRANSISTOR 2SA1162-G	
Q323	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q324	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q327	8-729-216-22	TRANSISTOR 2SA1162-G	
Q328	8-729-216-22	TRANSISTOR 2SA1162-G	
Q329	8-729-216-22	TRANSISTOR 2SA1162-G	
Q330	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q331	8-729-216-22	TRANSISTOR 2SA1162-G	
Q332	8-729-216-22	TRANSISTOR 2SA1162-G	
Q333	8-729-901-00	TRANSISTOR DTC124EK	
Q334	8-729-901-00	TRANSISTOR DTC124EK	
Q335	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q336	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q337	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q338	8-729-216-22	TRANSISTOR 2SA1162-G	
Q339	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q340	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q341	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q342	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q343	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q344	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q345	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q346	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q347	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q348	8-729-901-00	TRANSISTOR DTC124EK	
Q1302	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1303	8-729-920-74	TRANSISTOR 2SC2412K-QR	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R301	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R302	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R303	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R304	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R305	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R306	1-216-184-00	METAL GLAZE	270	5%	1/8W	
R307	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R308	1-216-184-00	METAL GLAZE	270	5%	1/8W	
R309	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R310	1-216-025-00	METAL GLAZE	100	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R311	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R312	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R313	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R314	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R315	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R316	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R317	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R320	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R321	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R322	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R323	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R324	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R325	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R326	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R327	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R328	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R329	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R330	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R331	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R332	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R333	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R334	1-249-422-11	CARBON	2.7K	5%	1/4W	
R335	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R336	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R337	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R338	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R339	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R340	1-216-103-00	METAL GLAZE	180K	5%	1/10W	
R341	1-216-115-00	METAL GLAZE	560K	5%	1/10W	
R342	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R343	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R344	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R345	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R346	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R347	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R348	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R349	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R350	1-216-184-00	METAL GLAZE	270	5%	1/8W	
R351	1-216-184-00	METAL GLAZE	270	5%	1/8W	
R352	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R353	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R354	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R355	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R356	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R357	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R358	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R359	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R360	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R361	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R362	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R363	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R364	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R365	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R366	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R367	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R368	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R369	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R370	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R371	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R372	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R373	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R374	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R375	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R376	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R377	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R378	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R379	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R380	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R381	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R382	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R383	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R384	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R385	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R386	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R387	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R388	1-216-202-00	METAL GLAZE	1.5K	5%	1/8W	
R389	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R390	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R391	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R392	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R393	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R394	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R395	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R396	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R397	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R398	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R399	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R400	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R401	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R402	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R403	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R404	1-216-202-00	METAL GLAZE	1.5K	5%	1/8W	
R405	1-216-208-00	METAL GLAZE	2.7K	5%	1/8W	
R406	1-216-748-11	METAL GLAZE	39K	5%	1/10W	
R407	1-216-748-11	METAL GLAZE	39K	5%	1/10W	
R408	1-216-748-11	METAL GLAZE	39K	5%	1/10W	
R409	1-216-748-11	METAL GLAZE	39K	5%	1/10W	
R410	1-216-202-00	METAL GLAZE	1.5K	5%	1/8W	
R411	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R412	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R413	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R414	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R415	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R416	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R417	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R418	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R419	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R420	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R421	1-216-208-00	METAL GLAZE	2.7K	5%	1/8W	
R422	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R423	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R424	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R425	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R426	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R427	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R428	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R429	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R430	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R431	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R432	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R434	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R435	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R1301	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1302	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1303	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1304	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1305	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	

B **P**

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1306	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1307	1-249-428-11	CARBON	8.2K	5%	1/4W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV301	1-238-012-11	RES, ADJ, CARBON 1K	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X301	1-567-307-11	OSCILLATOR, CRYSTAL	
X302	1-567-131-00	OSCILLATOR, CRYSTAL	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1623-001-A	P BOARD, COMPLETE *****************	
	*1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P	
	*1-565-393-11	CONNECTOR, BOARD TO BOARD	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C2001	1-101-005-00	CERAMIC	0.022MF		50V	
C2002	1-124-927-11	ELECT	4.7MF	20%	50V	
C2003	1-101-880-00	CERAMIC	47PF	5%	50V	
C2005	1-124-925-11	ELECT	2.2MF	20%	50V	
C2007	1-130-834-00	MYLAR	1MF	10%	63V	
C2008	1-130-834-00	MYLAR	1MF	10%	63V	
C2009	1-130-834-00	MYLAR	1MF	10%	63V	
C2011	1-101-880-00	CERAMIC	47PF	5%	50V	
C2012	1-101-880-00	CERAMIC	47PF	5%	50V	
C2013	1-124-925-11	ELECT	2.2MF	20%	50V	
C2015	1-124-122-11	ELECT	100MF	20%	50V	
C2016	1-106-220-00	MYLAR	0.1MF	10%	100V	
C2017	1-106-220-00	MYLAR	0.1MF	10%	100V	
C2018	1-106-220-00	MYLAR	0.1MF	10%	100V	
C2022	1-124-122-11	ELECT	100MF	20%	50V	
C2023	1-124-902-00	ELECT	0.47MF	20%	50V	
C2024	1-124-902-00	ELECT	0.47MF	20%	50V	
C2025	1-101-004-00	CERAMIC	0.01MF		50V	
C2026	1-101-004-00	CERAMIC	0.01MF		50V	
C2027	1-124-911-95	ELECT	220MF	20%	50V	
C2028	1-101-004-00	CERAMIC	0.01MF		50V	
C2029	1-123-875-11	ELECT	10MF	20%	50V	
C2030	1-101-880-00	CERAMIC	47PF	5%	50V	
C2031	1-101-880-00	CERAMIC	47PF	5%	50V	
C2032	1-124-927-11	ELECT	4.7MF	20%	50V	
C2037	1-102-978-00	CERAMIC	220PF	5%	50V	
C2038	1-124-902-00	ELECT	0.47MF	20%	50V	
C2039	1-124-902-00	ELECT	0.47MF	20%	50V	
C2040	1-123-875-11	ELECT	10MF	20%	50V	
C2041	1-124-122-11	ELECT	100MF	20%	50V	
C2101	1-126-233-11	ELECT	22MF	20%	50V	
C2102	1-126-103-11	ELECT	470MF	20%	16V	
C2104	1-124-910-11	ELECT	47MF	20%	50V	
C2106	1-126-233-11	ELECT	22MF	20%	50V	
C2108	1-136-165-00	FILM	0.1MF	5%	50V	
C2115	1-124-791-11	ELECT	1MF	20%	50V	
C2127	1-124-122-11	ELECT	100MF	20%	50V	
C2128	1-124-910-11	ELECT	47MF	20%	50V	
C2202	1-101-005-00	CERAMIC	0.022MF		50V	
C2203	1-101-005-00	CERAMIC	0.022MF		50V	
C2204	1-101-005-00	CERAMIC	0.022MF		50V	
C2205	1-126-233-11	ELECT	22MF	20%	50V	
C2207	1-101-004-00	CERAMIC	0.01MF		50V	
C2209	1-101-004-00	CERAMIC	0.01MF			50V
C2210	1-101-005-00	CERAMIC	0.022MF			50V
C2211	1-102-936-00	CERAMIC	3PF	0.25PF		50V
C2212	1-101-005-00	CERAMIC	0.022MF			50V
C2213	1-101-005-00	CERAMIC	0.022MF			50V
C2214	1-101-005-00	CERAMIC	0.022MF			50V
C2215	1-101-005-00	CERAMIC	0.022MF			50V
C2217	1-101-005-00	CERAMIC	0.022MF			50V
C2218	1-101-005-00	CERAMIC	0.022MF			50V
C2219	1-124-122-11	ELECT	100MF	20%		50V
C2220	1-101-005-00	CERAMIC	0.022MF			50V
C2221	1-124-122-11	ELECT	100MF	20%		50V
C2222	1-101-005-00	CERAMIC	0.022MF			50V
C2223	1-124-925-11	ELECT	2.2MF	20%		50V
C2224	1-101-005-00	CERAMIC	0.022MF			50V
C2225	1-101-005-00	CERAMIC	0.022MF			50V
C2226	1-101-005-00	CERAMIC	0.022MF			50V
C2227	1-124-122-11	ELECT	100MF	20%		50V
C2228	1-101-005-00	CERAMIC	0.022MF			50V

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D2001	8-719-911-19	DIODE 1SS119	
D2002	8-719-109-85	DIODE RD5.1ES-B2	
D2003	8-719-109-85	DIODE RD5.1ES-B2	
D2004	8-719-109-85	DIODE RD5.1ES-B2	
D2005	8-719-109-85	DIODE RD5.1ES-B2	
D2006	8-719-911-19	DIODE 1SS119	
D2007	8-719-911-19	DIODE 1SS119	
D2202	8-719-911-19	DIODE 1SS119	
D2203	8-719-911-19	DIODE 1SS119	
D2204	8-719-110-03	DIODE RD7.5ES-B2	
D2205	8-719-911-19	DIODE 1SS119	

<FILTER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
FL2001	1-236-129-11	ENCAPSULATED COMPONENT	
FL2002	1-236-129-11	ENCAPSULATED COMPONENT	
FL2003	1-236-129-11	ENCAPSULATED COMPONENT	
FL2004	1-236-129-11	ENCAPSULATED COMPONENT	
FL2005	1-236-129-11	ENCAPSULATED COMPONENT	
FL2006	1-236-129-11	ENCAPSULATED COMPONENT	
FL2007	1-236-129-11	ENCAPSULATED COMPONENT	
FL2008	1-236-129-11	ENCAPSULATED COMPONENT	
FL2009	1-236-129-11	ENCAPSULATED COMPONENT	
FL2010	1-236-129-11	ENCAPSULATED COMPONENT	
FL2011	1-236-129-11	ENCAPSULATED COMPONENT	
FL2012	1-236-129-11	ENCAPSULATED COMPONENT	
FL2013	1-236-129-11	ENCAPSULATED COMPONENT	
FL2015	1-236-129-11	ENCAPSULATED COMPONENT	
FL2016	1-236-129-11	ENCAPSULATED COMPONENT	
FL2017	1-236-129-11	ENCAPSULATED COMPONENT	
FL2018	1-236-129-11	ENCAPSULATED COMPONENT	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC2001	8-752-332-82	IC CXD1050A-09P	
IC2103	8-759-979-62	IC PCF8574	
IC2201	8-759-502-25	IC PIP2250	
	*1-540-123-11	SOCKET, IC 68P; IC2201	
IC2202	8-759-502-28	IC CCU2050-D343	
IC2203	8-759-725-18	IC PVPU2204	
IC2204	8-759-502-26	IC SPU2243	

REF.NO.	PART NO.	DESCRIPTION				REMARK
IC2205	8-759-502-27	IC DPU2553				
IC2206	8-759-997-99	IC VCU2133-60				
IC2207	8-759-105-98	IC UPD41464C-15				
IC2208	8-759-105-98	IC UPD41464C-15				
IC2209	8-759-720-22	IC MDA2062				
IC2210	8-759-720-22	IC MDA2062				
IC2211	8-759-502-24	IC MCU2600-56				
IC2212	8-759-998-02	IC TEA5114A				

<COIL>

L2002	1-408-414-00	INDUCTOR	27UH	
L2100	1-410-116-11	INDUCTOR	0.56MMH	
L2101	1-408-403-00	INDUCTOR	3.3UH	
L2102	1-408-413-00	INDUCTOR	22UH	
L2107	1-408-397-00	INDUCTOR	1UH	

<TRANSISTOR>

Q2001	8-729-900-89	TRANSISTOR DTC144ES	
Q2005	8-729-173-38	TRANSISTOR 2SA733-K	
Q2006	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2007	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2008	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2009	8-729-173-38	TRANSISTOR 2SA733-K	
Q2010	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2011	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2012	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2013	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2014	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2015	8-729-173-38	TRANSISTOR 2SA733-K	
Q2016	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2017	8-729-173-38	TRANSISTOR 2SA733-K	
Q2018	8-729-173-38	TRANSISTOR 2SA733-K	
Q2113	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2114	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2125	8-729-900-89	TRANSISTOR DTC144ES	
Q2126	8-729-900-65	TRANSISTOR DTA144ES	
Q2127	8-729-900-89	TRANSISTOR DTC144ES	
Q2201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2203	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2204	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

R2002	1-249-413-11	CARBON	470	5%	1/4W	
R2003	1-249-413-11	CARBON	470	5%	1/4W	
R2004	1-249-413-11	CARBON	470	5%	1/4W	
R2005	1-249-419-11	CARBON	1.5K	5%	1/4W	
R2006	1-249-419-11	CARBON	1.5K	5%	1/4W	
R2007	1-249-419-11	CARBON	1.5K	5%	1/4W	
R2010	1-249-411-11	CARBON	330	5%	1/4W	
R2014	1-249-417-11	CARBON	1K	5%	1/4W	
R2015	1-249-437-11	CARBON	47K	5%	1/4W	
R2016	1-249-439-11	CARBON	68K	5%	1/4W	
R2017	1-249-417-11	CARBON	1K	5%	1/4W	
R2018	1-249-405-11	CARBON	100	5%	1/4W	
R2019	1-249-417-11	CARBON	1K	5%	1/4W	
R2020	1-249-433-11	CARBON	22K	5%	1/4W	
R2021	1-249-429-11	CARBON	10K	5%	1/4W	
R2024	1-249-417-11	CARBON	1K	5%	1/4W	
R2025	1-249-433-11	CARBON	22K	5%	1/4W	
R2026	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2027	1-249-433-11	CARBON	22K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2030	1-249-417-11	CARBON	1K	5%	1/4W	
R2031	1-249-437-11	CARBON	47K	5%	1/4W	
R2032	1-249-439-11	CARBON	68K	5%	1/4W	
R2033	1-249-417-11	CARBON	1K	5%	1/4W	
R2034	1-249-405-11	CARBON	100	5%	1/4W	
R2035	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2036	1-249-402-11	CARBON	56	5%	1/4W	
R2037	1-249-402-11	CARBON	56	5%	1/4W	
R2038	1-249-402-11	CARBON	56	5%	1/4W	
R2039	1-249-397-11	CARBON	22	5%	1/4W	
R2040	1-249-397-11	CARBON	22	5%	1/4W	
R2041	1-249-397-11	CARBON	22	5%	1/4W	
R2046	1-249-411-11	CARBON	330	5%	1/4W	
R2047	1-249-439-11	CARBON	68K	5%	1/4W	
R2048	1-249-411-11	CARBON	330	5%	1/4W	
R2049	1-249-439-11	CARBON	68K	5%	1/4W	
R2050	1-249-436-11	CARBON	39K	5%	1/4W	
R2051	1-249-417-11	CARBON	1K	5%	1/4W	
R2052	1-249-436-11	CARBON	39K	5%	1/4W	
R2053	1-249-417-11	CARBON	1K	5%	1/4W	
R2054	1-249-417-11	CARBON	1K	5%	1/4W	
R2055	1-249-417-11	CARBON	1K	5%	1/4W	
R2056	1-249-417-11	CARBON	1K	5%	1/4W	
R2057	1-249-417-11	CARBON	1K	5%	1/4W	
R2058	1-249-405-11	CARBON	100	5%	1/4W	
R2059	1-249-405-11	CARBON	100	5%	1/4W	
R2060	1-249-429-11	CARBON	10K	5%	1/4W	
R2061	1-249-429-11	CARBON	10K	5%	1/4W	
R2063	1-249-405-11	CARBON	100	5%	1/4W	
R2064	1-249-405-11	CARBON	100	5%	1/4W	
R2065	1-249-405-11	CARBON	100	5%	1/4W	
R2066	1-249-405-11	CARBON	100	5%	1/4W	
R2067	1-249-405-11	CARBON	100	5%	1/4W	
R2068	1-249-405-11	CARBON	100	5%	1/4W	
R2072	1-249-405-11	CARBON	100	5%	1/4W	
R2073	1-249-413-11	CARBON	470	5%	1/4W	
R2074	1-249-413-11	CARBON	470	5%	1/4W	
R2075	1-249-405-11	CARBON	100	5%	1/4W	
R2076	1-249-433-11	CARBON	22K	5%	1/4W	
R2077	1-249-433-11	CARBON	22K	5%	1/4W	
R2078	1-249-417-11	CARBON	1K	5%	1/4W	
R2079	1-249-414-11	CARBON	560	5%	1/4W	
R2080	1-249-413-11	CARBON	470	5%	1/4W	
R2081	1-249-425-11	CARBON	4.7K	5%	1/4W	
R2082	1-249-417-11	CARBON	1K	5%	1/4W	
R2083	1-249-413-11	CARBON	470	5%	1/4W	
R2085	1-249-434-11	CARBON	27K	5%	1/4W	
R2086	1-249-440-11	CARBON	82K	5%	1/4W	
R2087	1-249-411-11	CARBON	330	5%	1/4W	
R2089	1-249-434-11	CARBON	27K	5%	1/4W	
R2090	1-249-440-11	CARBON	82K	5%	1/4W	
R2091	1-249-411-11	CARBON	330	5%	1/4W	
R2092	1-249-425-11	CARBON	4.7K	5%	1/4W	
R2093	1-249-425-11	CARBON	4.7K	5%	1/4W	
R2094	1-249-424-11	CARBON	3.9K	5%	1/4W	
R2095	1-249-424-11	CARBON	3.9K	5%	1/4W	
R2105	1-249-432-11	CARBON	18K	5%	1/4W	
R2107	1-249-433-11	CARBON	22K	5%	1/4W	
R2108	1-249-432-11	CARBON	18K	5%	1/4W	
R2110	1-249-429-11	CARBON	10K	5%	1/4W	
R2111	1-249-422-11	CARBON	2.7K	5%	1/4W	
R2116	1-249-404-00	CARBON	82	5%	1/4W	
R2118	1-249-435-11	CARBON	33K	5%	1/4W	

P **F1**

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2128	1-249-406-11	CARBON	120	5%	1/4W	
R2129	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2131	1-249-437-11	CARBON	47K	5%	1/4W	
R2158	1-249-405-11	CARBON	100	5%	1/4W	
R2159	1-249-405-11	CARBON	100	5%	1/4W	
R2162	1-249-440-11	CARBON	82K	5%	1/4W	
R2164	1-249-430-11	CARBON	12K	5%	1/4W	
R2169	1-249-422-11	CARBON	2.7K	5%	1/4W	
R2193	1-249-429-11	CARBON	10K	5%	1/4W	
R2201	1-249-429-11	CARBON	10K	5%	1/4W	
R2202	1-249-405-11	CARBON	100	5%	1/4W	
R2203	1-249-405-11	CARBON	100	5%	1/4W	
R2207	1-249-429-11	CARBON	10K	5%	1/4W	
R2208	1-249-429-11	CARBON	10K	5%	1/4W	
R2209	1-249-420-11	CARBON	1.8K	5%	1/4W	
R2210	1-249-405-11	CARBON	100	5%	1/4W	
R2216	1-249-413-11	CARBON	470	5%	1/4W	
R2217	1-249-415-11	CARBON	680	5%	1/4W	
R2218	1-249-420-11	CARBON	1.8K	5%	1/4W	
R2220	1-249-433-11	CARBON	22K	5%	1/4W	
R2221	1-249-429-11	CARBON	10K	5%	1/4W	
R2222	1-249-429-11	CARBON	10K	5%	1/4W	
R2223	1-247-889-00	CARBON	270K	5%	1/4W	
R2224	1-247-889-00	CARBON	270K	5%	1/4W	
R2225	1-249-417-11	CARBON	1K	5%	1/4W	
R2226	1-249-420-11	CARBON	1.8K	5%	1/4W	
R2231	1-249-429-11	CARBON	10K	5%	1/4W	
R2232	1-249-429-11	CARBON	10K	5%	1/4W	
R2236	1-249-429-11	CARBON	10K	5%	1/4W	
R2240	1-249-429-11	CARBON	10K	5%	1/4W	

<TUNER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
TU2101	⚠ 1-465-301-11	TUNER, ET (UV-816(PLL))	

<IF BLOCK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
VF2101	1-464-960-21	IF BLOCK (IFG-389)	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X2201	1-579-112-11	VIBRATOR, CRYSTAL	
X2202	1-579-108-11	VIBRATOR, CRYSTAL	
X2203	1-527-726-00	VIBRATOR, CRYSTAL	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-636-582-11	F1 BOARD ********	
	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
	*1-564-215-11	PIN, CONNECTOR 4P	
	*1-564-506-11	PLUG, CONNECTOR 3P	
	*1-564-509-11	PLUG, CONNECTOR 6P	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C651	⚠ 1-136-519-11	FILM	0.47MF	20%	300V	
C652	⚠ 1-136-518-11	FILM	0.33MF	20%	300V	
C658	⚠ 1-162-578-51	CERAMIC	0.0047MF	20%	400V	
C659	⚠ 1-162-578-51	CERAMIC	0.0047MF	20%	400V	
C660	⚠ 1-162-578-51	CERAMIC	0.0047MF	20%	400V	
C661	⚠ 1-162-578-51	CERAMIC	0.0047MF	20%	400V	
C662	⚠ 1-161-964-61	CERAMIC	0.0047MF		250V	
C663	⚠ 1-161-964-61	CERAMIC	0.0047MF		250V	
C664	1-162-599-12	CERAMIC	0.0047MF		250V	
C665	1-125-555-11	ELECT	330MF	20%	400V	
C671	1-124-911-95	ELECT	220MF	20%	50V	
C672	1-124-556-11	ELECT	2200MF	20%	16V	
C673	1-123-875-11	ELECT	10MF	20%	50V	
C674	1-124-473-95	ELECT	1000MF	20%	10V	
C675	1-124-910-11	ELECT	47MF	20%	50V	
C676	1-123-875-11	ELECT	10MF	20%	50V	
C677	1-126-176-11	ELECT	220MF	20%	10V	
C678	1-124-910-11	ELECT	47MF	20%	50V	
C679	⚠ 1-161-964-61	CERAMIC	0.0047MF		250V	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D651	⚠ 8-719-946-90	DIODE KBU4JL-6088	
D670	⚠ 8-719-521-10	DIODE S1VB10-S	
D671	⚠ 8-719-521-10	DIODE S1VB10-S	
D672	8-719-109-90	DIODE RD5.6ES-B3	
D673	8-719-911-19	DIODE 1SS119	
D674	8-719-911-19	DIODE 1SS119	
D675	8-719-911-19	DIODE 1SS119	
D676	8-719-911-19	DIODE 1SS119	
D677	8-719-911-19	DIODE 1SS119	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC671	8-759-982-13	IC RC7812FA	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
LF651	⚠ 1-424-436-11	TRANSFORMER, LINE FILTER	
LF652	⚠ 1-424-436-11	TRANSFORMER, LINE FILTER	
LF653	⚠ 1-421-592-11	TRANSFORMER, FERRITE	
T671	⚠ 1-450-263-11	TRANSFORMER, POWER	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q671	8-729-109-53	TRANSISTOR 2SD795A-P	
Q672	8-729-900-36	TRANSISTOR DTC124ES	
Q673	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q674	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q675	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R651	⚠ 1-205-949-11	WIREWOUND	1.8	5%	10W	F
R652	⚠ 1-205-949-11	WIREWOUND	1.8	5%	10W	F
R653	⚠ 1-244-945-91	CARBON	1M	5%	1/2W	
R658	⚠ 1-218-265-91	METAL GLAZE	8.2M	5%	1W	
R671	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W	F
R672	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W	F
R674	1-249-423-11	CARBON	3.3K	5%	1/4W	
R675	1-249-421-11	CARBON	2.2K	5%	1/4W	
R676	1-249-425-11	CARBON	4.7K	5%	1/4W	
R677	1-249-421-11	CARBON	2.2K	5%	1/4W	
R678	1-249-423-11	CARBON	3.3K	5%	1/4W	
R680	1-249-431-11	CARBON	15K	5%	1/4W	
R681	1-249-419-11	CARBON	1.5K	5%	1/4W	

<RELAY>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RY651	⚠ 1-515-579-11	RELAY	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

F1 F2 A SIF

<THERMISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
THP651⚠	1-808-059-31	THERMISTOR, POSITIVE	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-636-574-11	F2 BOARD ********	
	*1-566-664-11	PIN, CONNECTOR 4P	

<FUSE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
F451 ⚠	1-532-350-11	FUSE, TIME-LAG 4A/250V	
	1-533-230-11	HOLDER, FUSE; F451	

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S451 ⚠	1-571-433-11	SWITCH, PUSH (AC POWER)	

****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1632-015-A	A BOARD, COMPLETE *****************	
	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
	*1-564-881-11	PLUG, CONNECTOR 4P	
	*1-564-886-21	PLUG, CONNECTOR 9P	
	*1-565-393-11	CONNECTOR, BOARD TO BOARD	
	*1-565-503-11	CONNECTOR, BOARD TO BOARD 12P	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C101	1-126-233-11	ELECT	22MF	20%	50V	
C102	1-126-103-11	ELECT	470MF	20%	16V	
C104	1-124-910-11	ELECT	47MF	20%	50V	
C106	1-126-233-11	ELECT	22MF	20%	50V	
C108	1-136-165-00	FILM	0.1MF	5%	50V	
C109	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C111	1-124-925-11	ELECT	2.2MF	20%	50V	
C115	1-124-925-11	ELECT	2.2MF	20%	50V	
C127	1-124-122-11	ELECT	100MF	20%	50V	
C128	1-124-910-11	ELECT	47MF	20%	50V	
C129	1-124-910-11	ELECT	47MF	20%	50V	
C138	1-136-165-00	FILM	0.1MF	5%	50V	
C171	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C172	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C177	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C181	1-101-004-00	CERAMIC	0.01MF		50V	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC103	8-759-979-62	IC PCF8574	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L100	1-410-116-11	INDUCTOR	0.56MMH	
L101	1-408-225-00	INDUCTOR	3.3UH	
L102	1-408-413-00	INDUCTOR	22UH	
L107	1-408-397-00	INDUCTOR	1UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q113	8-729-271-22	TRANSISTOR 2SC2712-G	
Q114	8-729-271-22	TRANSISTOR 2SC2712-G	
Q115	8-729-271-22	TRANSISTOR 2SC2712-G	
Q116	8-729-271-22	TRANSISTOR 2SC2712-G	
Q125	8-729-900-89	TRANSISTOR DTC144ES	
Q126	8-729-901-06	TRANSISTOR DTA144EK	
Q181	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR252	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR253	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR255	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR256	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR257	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR258	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R101	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R105	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R107	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R108	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R110	1-249-429-11	CARBON	10K	5%	1/4W	
R111	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R116	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R118	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R128	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R129	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R130	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R157	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R158	1-249-405-11	CARBON	100	5%	1/4W	
R159	1-249-405-11	CARBON	100	5%	1/4W	
R161	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R162	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R163	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R164	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R165	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R167	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R168	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R169	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R181	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R182	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R193	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R194	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R195	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R196	1-216-113-00	METAL GLAZE	470K	5%	1/10W	

<TUNER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
TU101⚠	1-465-301-11	TUNER, ET (UV-816(PLL))	

<IF BLOCK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
VIF101	1-466-154-21	IF BLOCK (IFG-389S)	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-464-964-21	SIF BOARD (IF BLOCK IFG-5.5S) *********	
	*1-565-488-11	CONNECTOR, BOARD TO BOARD 12P	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1	1-164-232-11	CERAMIC CHIP	0.01MF	50V	
C2	1-164-232-11	CERAMIC CHIP	0.01MF	50V	
C3	1-164-232-11	CERAMIC CHIP	0.01MF	50V	
C4	1-164-232-11	CERAMIC CHIP	0.01MF	50V	

SIF C

REF.NO.	PART NO.	DESCRIPTION			REMARK
C5	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C6	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C7	1-124-791-11	ELECT	1MF	20%	50V
C8	1-123-875-11	ELECT	10MF	20%	50V
C9	1-130-471-00	MYLAR	0.001MF	5%	50V
C10	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C11	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C12	1-136-298-00	FILM	0.0033MF	2%	100V
C13	1-124-477-11	ELECT	47MF	20%	16V
C14	1-124-477-11	ELECT	47MF	20%	16V
C15	1-124-477-11	ELECT	47MF	20%	16V
C16	1-124-477-11	ELECT	47MF	20%	16V
C17	1-123-875-11	ELECT	10MF	20%	50V
C18	1-106-367-00	MYLAR	0.01MF	10%	400V
C19	1-106-367-00	MYLAR	0.01MF	10%	400V
C20	1-126-233-11	ELECT	22MF	20%	50V
C21	1-126-233-11	ELECT	22MF	20%	50V
C22	1-106-220-00	MYLAR	0.1MF	10%	100V
C23	1-106-228-00	MYLAR	0.22MF	10%	100V
C24	1-124-963-11	ELECT	33MF	20%	16V
C25	1-106-375-12	MYLAR	0.022MF	10%	250V
C26	1-106-383-00	MYLAR	0.047MF	10%	100V
C27	1-124-791-11	ELECT	1MF	20%	50V
C28	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C29	1-124-791-11	ELECT	1MF	20%	50V
C30	1-124-791-11	ELECT	1MF	20%	50V
C31	1-106-367-00	MYLAR	0.01MF	10%	400V
C32	1-130-479-00	MYLAR	0.0047MF	5%	50V
C33	1-163-081-00	CERAMIC CHIP	0.22MF		25V
C34	1-106-228-00	MYLAR	0.22MF	10%	100V
C35	1-123-875-11	ELECT	10MF	20%	50V
C36	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C37	1-124-477-11	ELECT	47MF	20%	16V
C38	1-124-477-11	ELECT	47MF	20%	16V

<DIODE>

D3	8-719-400-18	DIODE MA152WK

<IC>

IC1	8-759-003-90	IC TBA129
IC2	8-759-003-90	IC TBA129
IC3	8-759-030-48	IC TDA6600-2
IC4	8-759-946-99	IC TDA2595-V7

<COIL>

L1	1-408-410-00	INDUCTOR	12UH
L2	1-408-410-00	INDUCTOR	12UH
L3	1-410-064-11	INDUCTOR	2.7MMH
L4	1-408-421-00	INDUCTOR	100UH
L5	1-408-421-00	INDUCTOR	100UH

<TRANSISTOR>

Q2	8-729-901-00	TRANSISTOR DTC124EK
Q3	8-729-920-71	TRANSISTOR 2SA1037K-QR
Q4	8-729-901-00	TRANSISTOR DTC124EK

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
JC1	1-216-296-00	METAL GLAZE	0	5%	1/8W
JC2	1-216-296-00	METAL GLAZE	0	5%	1/8W
JC3	1-216-296-00	METAL GLAZE	0	5%	1/8W
JC4	1-216-296-00	METAL GLAZE	0	5%	1/8W
JC5	1-216-296-00	METAL GLAZE	0	5%	1/8W
R1	1-216-045-00	METAL GLAZE	680	5%	1/10W
R2	1-216-043-00	METAL GLAZE	560	5%	1/10W
R3	1-216-043-00	METAL GLAZE	560	5%	1/10W
R5	1-216-045-00	METAL GLAZE	680	5%	1/10W
R6	1-216-043-00	METAL GLAZE	560	5%	1/10W
R7	1-216-043-00	METAL GLAZE	560	5%	1/10W
R9	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R10	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R11	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R12	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R15	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R16	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R17	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R18	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R19	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R20	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R22	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R24	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R25	1-216-077-00	METAL GLAZE	15K	5%	1/10W

<VARIABLE RESISTOR>

RV1	1-238-547-11	RES, ADJ, CARBON 10K
RV2	1-238-549-11	RES, ADJ, CARBON 47K

<FILTER>

SFT1	1-527-840-00	FILTER, CERAMIC
SFT2	1-527-839-00	FILTER, CERAMIC

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*A-1638-010-A	C BOARD, COMPLETE

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1-506-348-99	PIN, CONNECTOR 3P
*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
*1-564-506-11	PLUG, CONNECTOR 3P
*1-564-509-11	PLUG, CONNECTOR 6P
*4-379-160-01	COVER (REAR LID), CV
*4-379-167-01	COVER (MAIN), CV

<CAPACITOR>

C703	1-102-822-00	CERAMIC	390PF	5%	50V
C704	1-102-116-00	CERAMIC	680PF	10%	50V
C705	1-102-980-00	CERAMIC	270PF	5%	50V
C706	1-102-116-00	CERAMIC	680PF	10%	50V
C707	1-162-116-00	CERAMIC	680PF	10%	2KV
C708	1-162-114-00	CERAMIC	0.0047MF		2KV
C709	1-102-116-00	CERAMIC	680PF	10%	50V
C710	1-123-948-00	ELECT	22MF	20%	250V
C711	1-101-880-00	CERAMIC	47PF	5%	50V
C712	1-102-820-00	CERAMIC	330PF	5%	50V
C714	1-126-103-11	ELECT	470MF	20%	16V
C716	1-162-622-11	CERAMIC	330PF	10%	400V
C717	1-102-114-00	CERAMIC	470PF	10%	50V
C718	1-102-114-00	CERAMIC	470PF	10%	50V
C719	1-102-114-00	CERAMIC	470PF	10%	50V
C721	1-123-875-11	ELECT	10MF	20%	50V

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D701	8-719-911-19	DIODE 1SS119	
D702	8-719-911-19	DIODE 1SS119	
D703	8-719-911-19	DIODE 1SS119	
D704	8-719-911-19	DIODE 1SS119	
D705	8-719-911-19	DIODE 1SS119	
D706	8-719-911-19	DIODE 1SS119	
D707	8-719-911-19	DIODE 1SS119	
D708	8-719-911-19	DIODE 1SS119	
D709	8-719-911-19	DIODE 1SS119	
D710	8-719-911-19	DIODE 1SS119	
D711	8-719-300-33	DIODE RU-3AM	
D713	8-719-110-14	DIODE RD9.1ES-B3	

<JACK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
J701	1-526-798-51	SOCKET, PICTURE TUBE	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L704	1-410-878-11	INDUCTOR	33UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q703	8-729-326-11	TRANSISTOR 2SC2611	
	*4-386-664-01	SPRING; Q703	
Q704	8-729-200-17	TRANSISTOR 2SA1091-O	
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q706	8-729-326-11	TRANSISTOR 2SC2611	
	*4-386-664-01	SPRING; Q706	
Q707	8-729-200-17	TRANSISTOR 2SA1091-O	
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q709	8-729-326-11	TRANSISTOR 2SC2611	
	*4-386-664-01	SPRING; Q709	
Q710	8-729-200-17	TRANSISTOR 2SA1091-O	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R704	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R705	1-202-824-00	SOLID	3.3K	10%	1/2W	
R706	1-249-409-11	CARBON	220	5%	1/4W	
R707	1-249-411-11	CARBON	330	5%	1/4W	
R708	1-249-397-11	CARBON	22	5%	1/4W	
R709	1-202-844-00	SOLID	330K	10%	1/2W	
R710	1-214-897-00	METAL	22K	1%	W	
R712	1-249-417-11	CARBON	1K	5%	1/4W	
R713	1-214-905-00	METAL	47K	1%	W	
R714	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R715	1-202-824-00	SOLID	3.3K	10%	1/2W	
R716	1-249-409-11	CARBON	220	5%	1/4W	
R717	1-249-415-11	CARBON	680	5%	1/4W	
R718	1-202-814-11	SOLID	33K	10%	1/2W	
R720	1-249-423-11	CARBON	3.3K	5%	1/4W	
R721	1-202-842-11	SOLID	220K	10%	1/2W	
R722	1-202-848-00	SOLID	680K	10%	1/2W	
R723	1-249-417-11	CARBON	1K	5%	1/4W	
R724	1-202-846-00	SOLID	470K	10%	1/2W	
R725	1-202-838-00	SOLID	100K	10%	1/2W	
R726	1-202-824-00	SOLID	3.3K	10%	1/2W	
R727	1-249-409-11	CARBON	220	5%	1/4W	
R728	1-216-350-11	METAL OXIDE	1.2	5%	1W	F
R729	1-249-416-11	CARBON	820	5%	1/4W	
R731	1-249-423-11	CARBON	3.3K	5%	1/4W	
R732	1-249-415-11	CARBON	680	5%	1/4W	
R733	1-249-415-11	CARBON	680	5%	1/4W	
R734	1-249-405-11	CARBON	100	5%	1/4W	
R735	1-214-915-00	METAL	120K	1%	W	
R736	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R737	1-214-913-00	METAL	100K	1%	W	
R738	1-202-549-00	SOLID	100	10%	1/2W	
R739	1-249-417-11	CARBON	1K	5%	1/4W	
R740	1-202-846-00	SOLID	470K	10%	1/2W	
R741	1-202-837-00	SOLID	82K	10%	1/2W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
RV702	1-230-619-11	RES, ADJ, METAL GLAZE 110M	
RV703	1-228-991-00	RES, ADJ, CARBON 2.2K	
RV704	1-228-991-00	RES, ADJ, CARBON 2.2K	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1642-025-A	D BOARD, COMPLETE ****************	
	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P	
	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
	*1-559-991-41	CONNECTOR ASSY 1P	
	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
	*1-564-104-00	PIN, CONNECTOR 3P	
	*1-564-506-11	PLUG, CONNECTOR 3P	
	*1-564-507-11	PLUG, CONNECTOR 4P	
	*1-564-515-11	PLUG, CONNECTOR 12P	
	*1-568-536-11	PLUG (MINIATURE DY) 6P	
	*4-341-751-01	EYELET (EY5,EY6,EY7,EY8,EY9,EY10,EY14, EY15,EY16,EY17,EY26,EY27,EY28,EY29,EY30)	
	*4-341-752-01	EYELET (EY1,EY2,EY3,EY4,EY12,EY13,EY20, EY21,EY23,EY24)	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C501	1-124-927-11	ELECT	4.7MF	20%	50V	
C502	1-124-927-11	ELECT	4.7MF	20%	50V	
C503	1-106-371-00	MYLAR	0.015MF	10%	400V	
C504	1-101-361-00	CERAMIC	150PF	5%	50V	
C505	1-130-473-00	MYLAR	0.0015MF	5%	50V	
C506	1-106-375-12	MYLAR	0.022MF	10%	250V	
C508	1-106-375-12	MYLAR	0.022MF	10%	250V	
C509	1-106-220-00	MYLAR	0.1MF	10%	100V	
C510	1-161-959-00	CERAMIC	22PF	10%	500V	
C511	1-108-686-11	MYLAR	0.0033MF	10%	100V	
C513	1-108-680-11	MYLAR	0.001MF	10%	100V	
C514	1-106-228-00	MYLAR	0.22MF	10%	100V	
C515	1-124-791-11	ELECT	1MF	20%	50V	
C516	1-102-112-00	CERAMIC	330PF	10%	50V	
C518	1-124-902-00	ELECT	0.47MF	20%	50V	
C519	1-136-173-00	FILM	0.47MF	5%	50V	
C520	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C521	1-106-220-00	MYLAR	0.1MF	10%	100V	
C522	1-126-105-11	ELECT	1000MF	20%	35V	
C523	1-108-680-11	MYLAR	0.001MF	10%	100V	
C524	1-108-686-11	MYLAR	0.0033MF	10%	100V	
C525	1-102-973-00	CERAMIC	100PF	5%	50V	
C527	1-106-220-00	MYLAR	0.1MF	10%	100V	
C531	1-126-104-11	ELECT	470MF	20%	25V	
C532	1-124-122-11	ELECT	100MF	20%	50V	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C533	1-106-216-00	MYLAR	0.068MF	10%	100V
C534	1-124-120-11	ELECT	220MF	20%	25V
C536	1-131-365-00	TANTALUM	10MF	10%	16V
C537	1-124-791-11	ELECT	1MF	20%	50V
C538	1-108-680-11	MYLAR	0.001MF	10%	100V
C539	1-102-820-00	CERAMIC	330PF	5%	50V
C541	1-124-902-00	ELECT	0.47MF	20%	50V
C550	1-101-004-00	CERAMIC	0.01MF		50V
C578	1-124-927-11	ELECT	4.7MF	20%	50V
C593	1-102-820-00	CERAMIC	330PF	5%	50V
C596	1-106-220-00	MYLAR	0.1MF	10%	100V
C597	1-102-951-00	CERAMIC	15PF	10%	50V
C801	1-126-105-11	ELECT	1000MF	20%	35V
C802	1-102-228-00	CERAMIC	470PF	10%	500V
C804	1-123-948-00	ELECT	22MF	20%	250V
C805 ⚠	1-162-114-51	CERAMIC	0.0047MF		2KV
C806	1-106-387-00	MYLAR	0.068MF	10%	200V
C807	1-106-395-00	MYLAR	0.15MF	10%	200V
C810	1-123-024-21	ELECT	33MF		160V
C811	1-136-541-11	FILM	1.5MF	5%	200V
C812	1-123-946-00	ELECT	4.7MF	20%	250V
C813	1-102-212-00	CERAMIC	820PF	10%	500V
C814 ⚠	1-161-731-11	CERAMIC	0.001MF	10%	2KV
C815	1-136-597-11	FILM	0.89MF	5%	200V
C817	1-136-686-11	FILM	0.018MF	3%	1.4KV
C818	1-136-759-11	FILM	0.039MF	5%	630V
C819 ⚠	1-162-116-51	CERAMIC	680PF	10%	2KV
C820 ⚠	1-110-189-81	MYLAR	0.0082MF	10%	400V
C821 ⚠	1-162-116-51	CERAMIC	680PF	10%	2KV
C822	1-102-114-00	CERAMIC	470PF	10%	50V
C823	1-106-359-00	MYLAR	0.0047MF	10%	400V
C824	1-102-212-00	CERAMIC	820PF	10%	500V
C828	1-106-383-00	MYLAR	0.047MF	10%	100V
C829	1-110-184-91	MYLAR	0.033MF	20%	250V
C849	1-102-112-00	CERAMIC	330PF	10%	50V
C850	1-101-821-00	CERAMIC	0.0022MF		500V
C851	1-126-105-11	ELECT	1000MF	20%	35V
C852	1-102-002-00	CERAMIC	680PF	10%	500V
C854	1-124-122-11	ELECT	100MF	20%	50V
C855	1-124-791-11	ELECT	1MF	20%	50V
C860	1-106-399-00	MYLAR	0.22MF	10%	200V
C861 ⚠	1-161-731-11	CERAMIC	0.001MF	10%	2KV
C1501	1-124-925-11	ELECT	2.2MF	20%	50V
C1502	1-123-875-11	ELECT	10MF	20%	50V
C1503	1-108-680-11	MYLAR	0.001MF	10%	100V
C1504	1-124-910-11	ELECT	47MF	20%	50V
C1505	1-106-383-00	MYLAR	0.047MF	10%	100V
C1507	1-108-686-11	MYLAR	0.0033MF	10%	100V
C1508	1-123-875-11	ELECT	10MF	20%	50V
C1509	1-124-791-11	ELECT	1MF	20%	50V
C1511	1-123-875-11	ELECT	10MF	20%	50V
C1512	1-106-367-00	MYLAR	0.01MF	10%	100V
C1513	1-102-963-00	CERAMIC	33PF	5%	50V
C1520	1-102-108-00	CERAMIC	150PF	10%	50V
C1551	1-124-902-00	ELECT	0.47MF	20%	50V
C1552	1-124-122-11	ELECT	100MF	20%	50V
C1553	1-102-228-00	CERAMIC	470PF	10%	500V
C1638	1-106-228-00	MYLAR	0.22MF	10%	100V
C1639	1-101-006-00	CERAMIC	0.047MF		50V
C1640	1-101-006-00	CERAMIC	0.047MF		50V
C1651	1-106-220-00	MYLAR	0.1MF	10%	100V
C1654	1-106-220-00	MYLAR	0.1MF	10%	100V
C1655	1-106-220-00	MYLAR	0.1MF	10%	100V
C1656	1-124-902-00	ELECT	0.47MF	20%	50V
C1657	1-106-383-00	MYLAR	0.047MF	10%	100V
C1707	1-106-363-00	MYLAR	0.0068MF	10%	400V
C1708	1-106-359-00	MYLAR	0.0047MF	10%	400V
C1710	1-106-224-00	MYLAR	0.15MF	10%	100V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1711	1-124-925-11	ELECT	2.2MF	20%	50V
C1712	1-124-927-11	ELECT	4.7MF	20%	50V
C1713	1-124-910-11	ELECT	47MF	20%	50V
C1714	1-124-911-95	ELECT	220MF	20%	50V
C1715	1-124-910-11	ELECT	47MF	20%	50V
C1716	1-106-228-00	MYLAR	0.22MF	10%	100V
C1717	1-124-120-11	ELECT	220MF	20%	25V
C1718	1-136-165-00	FILM	0.1MF	5%	50V
C1719	1-124-927-11	ELECT	4.7MF	20%	50V
C1720	1-124-927-11	ELECT	4.7MF	20%	50V
C1721	1-123-875-11	ELECT	10MF	20%	50V
C1722	1-124-927-11	ELECT	4.7MF	20%	50V
C1723	1-123-875-11	ELECT	10MF	20%	50V
C1724	1-126-233-11	ELECT	22MF	20%	50V
C1725	1-124-360-00	ELECT	1000MF	20%	16V
C1726	1-124-910-11	ELECT	47MF	20%	50V
C1727	1-124-910-11	ELECT	47MF	20%	50V
C1734	1-124-360-00	ELECT	1000MF	20%	16V
C1735	1-106-379-12	MYLAR	0.033MF	10%	250V
C1736	1-124-791-11	ELECT	1MF	20%	50V
C1740	1-102-244-00	CERAMIC	220PF	10%	500V
C5502	1-124-119-00	ELECT	330MF	20%	16V
C5505	1-124-463-00	ELECT	0.1MF	20%	50V

<FILTER>

CF501	1-567-888-11	OSCILLATOR, CERAMIC

<DIODE>

D502	8-719-200-02	DIODE 10E2
D504	8-719-911-55	DIODE U05G
D506	8-719-016-42	DIODE MC932
D508	8-719-911-19	DIODE 1SS119
D511	8-719-911-55	DIODE U05G
D512	8-719-911-55	DIODE U05G
D513	8-719-109-81	DIODE RD4.7ES-B2
D801	8-719-300-33	DIODE RU-3AM
D802	8-719-300-33	DIODE RU-3AM
D803	8-719-901-19	DIODE V11N
D804	8-719-911-55	DIODE U05G
D805	8-719-911-55	DIODE U05G
D806	8-719-945-80	DIODE ERC06-15S
D807	8-719-945-80	DIODE ERC06-15S
D808	8-719-900-26	DIODE ERD29-08J
D809	8-719-911-19	DIODE 1SS119
D850	8-719-979-85	DIODE EGP20G
D1501	8-719-300-33	DIODE RU-3AM
D1502	8-719-911-19	DIODE 1SS119
D1503	8-719-911-19	DIODE 1SS119
D1504	8-719-911-19	DIODE 1SS119
D1505	8-719-016-42	DIODE MC932
D1515	8-719-911-19	DIODE 1SS119
D1552	8-719-300-33	DIODE RU-3AM
D1652	8-719-200-02	DIODE 10E2
D1701	8-719-979-85	DIODE EGP20G
D1702	8-719-980-78	DIODE ERA83-006
D1703	8-719-980-78	DIODE ERA83-006
D1704	8-719-911-19	DIODE 1SS119
D1705	8-719-911-19	DIODE 1SS119
D1707	8-719-300-33	DIODE RU-3AM
D1708	8-719-109-81	DIODE RD4.7ES-B2
D1709	8-719-109-89	DIODE RD5.6ES-B2

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1710	8-719-109-89	DIODE RD5.6ES-B2	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC501	8-759-970-73	IC TEA2028B	
IC502	8-759-944-57	IC TDA8170	
IC503	8-749-920-60	IC STR90120	
IC1501	8-759-942-16	IC TEA2031A	
IC1701	8-759-103-93	IC UPC393C	
IC1702	8-759-112-93	IC UPC4570HA-1	
IC1704	8-759-982-13	IC RC7812FA	
	*4-363-147-00	HEAT SINK, H.PIN; IC1704	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L501	1-408-225-00	INDUCTOR 3.3UH	
L801	1-459-111-00	COIL, DRAM CORE (CDI)	
L803	1-459-104-00	COIL, DUST CORE	
L804	1-408-235-00	INDUCTOR 2.2MMH	
L806	1-459-111-00	COIL, DRAM CORE (CDI)	
L807	1-408-938-00	INDUCTOR 22UH	
L809	*1-420-872-00	COIL, AIR CORE	
L811	1-459-104-00	COIL, DUST CORE	
L812	1-408-698-00	INDUCTOR 8.2UH	
L850	1-408-225-00	INDUCTOR 3.3UH	
L1651	1-443-012-00	TRANSFORMER, DYNAMIC CONVERSION	
L1652	1-459-583-11	COIL (WITH CORE)	
L1653	1-408-247-00	INDUCTOR 33MMH	
L1654	1-408-421-00	INDUCTOR 100UH	
L1702	1-410-093-11	INDUCTOR 33MMH	
L1703	1-459-592-11	COIL (WITH CORE) (PMC)	
L1704	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE	
L1705	1-408-235-00	INDUCTOR 2.2MMH	

<NEON LAMP>

REF.NO.	PART NO.	DESCRIPTION	REMARK
NL801	1-519-108-99	LAMP, NEON	

<IC LINK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
PS1659⚠	1-532-727-91	LINK, IC 0.25A	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q501	8-729-173-38	TRANSISTOR 2SA733-K	
Q502	8-729-173-38	TRANSISTOR 2SA733-K	
Q505	8-729-140-96	TRANSISTOR 2SD774-34	
Q506	8-729-140-97	TRANSISTOR 2SB734-34	
Q507	8-729-173-38	TRANSISTOR 2SA733-K	
Q509	8-729-900-80	TRANSISTOR DTC114ES	
Q510	8-729-900-80	TRANSISTOR DTC114ES	
Q591	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q592	8-729-900-80	TRANSISTOR DTC114ES	
Q804	8-729-305-01	TRANSISTOR 2SD1941-07	
	*4-378-214-01	HOLDER, TR; Q804	
Q805	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q806	8-729-122-12	TRANSISTOR 2SA1221-L	
Q807	8-729-107-53	TRANSISTOR 2SC2275A-P	
Q1551	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1552	8-729-208-71	TRANSISTOR 2SC3298B-O	
Q1608	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1653	8-729-195-82	TRANSISTOR 2SC2958-L	
Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1703	8-729-208-71	TRANSISTOR 2SC3298B-O	
Q1704	8-729-140-96	TRANSISTOR 2SD774-34	
Q1705	8-729-140-96	TRANSISTOR 2SD774-34	
Q1706	8-729-173-38	TRANSISTOR 2SA733-K	
Q1707	8-729-809-29	TRANSISTOR 2SC4159-E	
Q1708	8-729-140-97	TRANSISTOR 2SB734-34	
Q1709	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1710	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1711	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1712	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1716	8-729-900-80	TRANSISTOR DTC114ES	
Q1717	8-729-173-38	TRANSISTOR 2SA733-K	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R500	1-247-897-11	CARBON	560K	5%	1/4W	
R501	1-247-708-11	CARBON	470	5%	1/4W	
R502	1-249-409-11	CARBON	220	5%	1/4W	
R503	1-249-410-11	CARBON	270	5%	1/4W	
R504	1-214-870-00	METAL	1.8K	1%	W	
R509	1-249-424-11	CARBON	3.9K	5%	1/4W	
R510	1-249-426-11	CARBON	5.6K	5%	1/4W	
R511	1-247-719-11	CARBON	3.3K	5%	1/4W	
R513A	1-249-461-11	CARBON	18K	5%	1/4W	
R514	1-249-409-11	CARBON	220	5%	1/4W	
R515	1-249-423-11	CARBON	3.3K	5%	1/4W	
R516	1-249-408-11	CARBON	180	5%	1/4W	
R517	1-247-725-11	CARBON	10K	5%	1/4W	
R518	1-249-434-11	CARBON	27K	5%	1/4W	
R519	1-249-429-11	CARBON	10K	5%	1/4W	
R520	1-249-411-11	CARBON	330	5%	1/4W	
R521	1-247-700-11	CARBON	100	5%	1/4W	
R522	1-247-903-00	CARBON	1M	5%	1/4W	
R523	1-249-393-11	CARBON	10	5%	1/4W	
R524	1-249-421-11	CARBON	2.2K	5%	1/4W	
R525	1-249-417-11	CARBON	1K	5%	1/4W	
R526	1-212-889-00	FUSIBLE	220	5%	1/4W	F
R527	1-249-460-11	CARBON	15K	5%	1/4W	
R530	1-217-376-00	FUSIBLE	1.2	5%	1/4W	F
R531	1-247-881-00	CARBON	120K	5%	1/4W	
R532	1-247-713-11	CARBON	1K	5%	1/4W	
R533	1-249-393-11	CARBON	10	5%	1/4W	
R534	1-246-543-00	CARBON	820K	5%	1/4W	
R536	1-247-725-11	CARBON	10K	5%	1/4W	
R537	1-249-463-11	CARBON	27K	5%	1/4W	
R538	1-249-441-11	CARBON	100K	5%	1/4W	
R539	1-247-883-00	CARBON	150K	5%	1/4W	
R540	1-249-434-11	CARBON	27K	5%	1/4W	
R541	1-249-438-11	CARBON	56K	5%	1/4W	
R542	1-249-425-11	CARBON	4.7K	5%	1/4W	
R543	1-217-376-00	FUSIBLE	1.2	5%	1/4W	F
R544	1-247-745-11	CARBON	330	5%	1/2W	
R545	1-247-725-11	CARBON	10K	5%	1/4W	
R546	1-249-434-11	CARBON	27K	5%	1/4W	
R547	1-249-423-11	CARBON	3.3K	5%	1/4W	
R548	1-216-349-00	METAL OXIDE	1	5%	1W	F
R549	1-215-890-11	METAL OXIDE	470	5%	2W	F
R550	1-249-440-11	CARBON	82K	5%	1/4W	
R551	1-249-752-11	CARBON	3.9M	5%	1/4W	
R553	1-215-869-11	METAL OXIDE	1K	5%	1W	
R554	1-249-411-11	CARBON	330	5%	1/4W	
R555	1-249-749-00	CARBON	2.2M	5%	1/4W	
R556	1-249-405-11	CARBON	100	5%	1/4W	
R557	1-249-425-11	CARBON	4.7K	5%	1/4W	
R558	1-247-903-00	CARBON	1M	5%	1/4W	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R559	1-249-427-11	CARBON	6.8K	5%	1/4W	
R560	1-249-411-11	CARBON	330	5%	1/4W	
R575	1-249-435-11	CARBON	33K	5%	1/4W	
R585	1-249-422-11	CARBON	2.7K	5%	1/4W	
R595	1-249-417-11	CARBON	1K	5%	1/4W	
R596	1-249-415-11	CARBON	680	5%	1/4W	
R802	1-249-474-11	CARBON	1	5%	1/2W	F
R805	1-249-474-11	CARBON	1	5%	1/2W	F
R806	1-249-467-11	CARBON	68K	5%	1/4W	
R807	1-215-869-11	METAL OXIDE	1K	5%	1W	
R809	1-247-756-11	CARBON	2.2K	5%	1/2W	
R815	1-212-972-00	FUSIBLE	39	5%	1/2W	F
R816	1-215-868-00	METAL OXIDE	680	5%	1W	
R817	1-249-417-11	CARBON	1K	5%	1/4W	
R820	1-249-403-11	CARBON	68	5%	1/4W	
R821	1-217-826-11	FUSIBLE	10K	5%	1/4W	
R822	1-217-778-11	FUSIBLE	1K	5%	1W	F
R825	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R831	1-217-811-11	FUSIBLE	0.47	5%	1/4W	F
R832	1-212-865-00	FUSIBLE	22	5%	1/4W	
R833	1-216-379-11	METAL OXIDE	6.8	5%	2W	F
R834	1-249-482-11	CARBON	4.7	5%	1/2W	F
R835	1-215-884-11	METAL OXIDE	47	5%	2W	
R836	1-215-884-11	METAL OXIDE	47	5%	2W	
R837	1-215-911-11	METAL OXIDE	100	5%	3W	F
R839	1-249-429-11	CARBON	10K	5%	1/4W	
R840	1-249-496-11	CARBON	100K	5%	1/2W	
R841	1-247-713-11	CARBON	1K	5%	1/4W	
R842	1-247-713-11	CARBON	1K	5%	1/4W	
R843	1-216-389-11	METAL OXIDE	1	5%	3W	F
R844	1-214-864-00	METAL	1K	1%	W	
R845	1-214-913-00	METAL	100K	1%	1/2W	
R846	1-249-496-11	CARBON	100K	5%	1/2W	
R847	1-249-429-11	CARBON	10K	5%	1/4W	
R848	1-215-925-11	METAL OXIDE	22K	5%	3W	F
R849	1-215-925-11	METAL OXIDE	22K	5%	3W	F
R1501	1-249-462-11	CARBON	22K	5%	1/4W	
R1502	1-249-434-11	CARBON	27K	5%	1/4W	
R1503	1-247-895-00	CARBON	470K	5%	1/4W	
R1504	1-249-435-11	CARBON	33K	5%	1/4W	
R1505	1-249-433-11	CARBON	22K	5%	1/4W	
R1506	1-247-895-00	CARBON	470K	5%	1/4W	
R1507	1-247-895-00	CARBON	470K	5%	1/4W	
R1508	1-249-438-11	CARBON	56K	5%	1/4W	
R1509	1-249-441-11	CARBON	100K	5%	1/4W	
R1510	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1511	1-249-417-11	CARBON	1K	5%	1/4W	
R1512	1-247-725-11	CARBON	10K	5%	1/4W	
R1513	1-247-883-00	CARBON	150K	5%	1/4W	
R1514	1-249-417-11	CARBON	1K	5%	1/4W	
R1515	1-249-439-11	CARBON	68K	5%	1/4W	
R1516	1-249-432-11	CARBON	18K	5%	1/4W	
R1517	1-249-411-11	CARBON	330	5%	1/4W	
R1518	1-249-429-11	CARBON	10K	5%	1/4W	
R1519	1-247-897-11	CARBON	560K	5%	1/4W	
R1521	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1523	1-247-903-00	CARBON	1M	5%	1/4W	
R1552	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1553	1-215-917-11	METAL OXIDE	1K	5%	3W	F
R1554	1-249-407-11	CARBON	150	5%	1/4W	
R1602	1-247-881-00	CARBON	120K	5%	1/4W	
R1636	1-249-431-11	CARBON	15K	5%	1/4W	
R1638	1-249-435-11	CARBON	33K	5%	1/4W	
R1643	1-247-721-11	CARBON	4.7K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1656	1-249-415-11	CARBON	680	5%	1/4W	
R1657	1-249-411-11	CARBON	330	5%	1/4W	
R1658	1-249-411-11	CARBON	330	5%	1/4W	F
R1660	1-215-911-11	METAL OXIDE	100	5%	3W	F
R1720	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1721	1-249-429-11	CARBON	10K	5%	1/4W	
R1722	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1723	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1724	1-249-429-11	CARBON	10K	5%	1/4W	
R1725	1-249-429-11	CARBON	10K	5%	1/4W	
R1726	1-249-441-11	CARBON	100K	5%	1/4W	
R1728	1-215-890-11	METAL OXIDE	470	5%	2W	F
R1729	1-216-449-11	METAL OXIDE	56	5%	2W	
R1730	1-249-441-11	CARBON	100K	5%	1/4W	
R1731	1-215-869-11	METAL OXIDE	1K	5%	1W	
R1733	1-249-414-11	CARBON	560	5%	1/4W	
R1734	1-249-393-11	CARBON	10	5%	1/4W	
R1735	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1736	1-247-895-00	CARBON	470K	5%	1/4W	
R1737	1-249-429-11	CARBON	10K	5%	1/4W	
R1738	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1739	1-249-429-11	CARBON	10K	5%	1/4W	
R1740	1-249-435-11	CARBON	33K	5%	1/4W	
R1741	1-249-429-11	CARBON	10K	5%	1/4W	
R1742	1-249-432-11	CARBON	18K	5%	1/4W	
R1743	1-247-895-00	CARBON	470K	5%	1/4W	
R1744	1-249-429-11	CARBON	10K	5%	1/4W	
R1745	1-249-415-11	CARBON	680	5%	1/4W	
R1746	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1747	1-249-429-11	CARBON	10K	5%	1/4W	
R1748	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1749	1-249-441-11	CARBON	100K	5%	1/4W	
R1750	1-249-409-11	CARBON	220	5%	1/4W	
R1751	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1752	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1753	1-249-417-11	CARBON	1K	5%	1/4W	
R1754	1-249-429-11	CARBON	10K	5%	1/4W	
R1755	1-249-429-11	CARBON	10K	5%	1/4W	
R1756	1-247-713-11	CARBON	1K	5%	1/4W	
R1757	1-249-413-11	CARBON	470	5%	1/4W	
R1758	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1759	1-215-906-11	METAL OXIDE	15	5%	3W	F
R1760	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1761	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1762	1-215-858-00	METAL OXIDE	15	5%	1W	
R1763	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1764	1-249-409-11	CARBON	220	5%	1/4W	
R1774	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1775	1-249-429-11	CARBON	10K	5%	1/4W	
R1776	1-247-706-11	CARBON	330	5%	1/4W	
R1778	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1779	1-249-422-11	CARBON	2.7K	5%	1/4W	
R1780	1-249-437-11	CARBON	47K	5%	1/4W	
R1787	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1792	1-249-435-11	CARBON	33K	5%	1/4W	
R1794	1-249-419-11	CARBON	1.5K	5%	1/4W	
R5113	1-249-467-11	CARBON	68K	5%	1/4W	
R5501	1-247-725-11	CARBON	10K	5%	1/4W	
R5502	1-249-417-11	CARBON	1K	5%	1/4W	
R5503	1-249-429-11	CARBON	10K	5%	1/4W	
R5504	1-249-459-11	CARBON	12K	5%	1/4W	
R5505	1-215-870-11	METAL OXIDE	1.5K	5%	1W	
R5511	1-249-429-11	CARBON	10K	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV502	1-238-016-11	RES, ADJ, CARBON 10K	
RV1501	1-238-023-11	RES, ADJ, CARBON 470K	
RV1502	1-238-016-11	RES, ADJ, CARBON 10K	
RV1503	1-238-017-11	RES, ADJ, CARBON 22K	
RV1504	1-238-012-11	RES, ADJ, CARBON 1K	
RV1505	1-238-023-11	RES, ADJ, CARBON 470K	
RV1506	1-238-017-11	RES, ADJ, CARBON 22K	
RV1507	1-238-009-11	RES, ADJ, CARBON 220	
RV1508	1-238-015-11	RES, ADJ, CARBON 4.7K	
RV1509	1-238-023-11	RES, ADJ, CARBON 470K	
RV1701	1-238-012-11	RES, ADJ, CARBON 1K	
RV1702	1-238-016-11	RES, ADJ, CARBON 10K	
RV1703	1-238-012-11	RES, ADJ, CARBON 1K	
RV1704	1-238-016-11	RES, ADJ, CARBON 10K	
RV1705	1-238-017-11	RES, ADJ, CARBON 22K	

<SPARK GAP>

REF.NO.	PART NO.	DESCRIPTION	REMARK
SG801	1-519-063-99	DISCHARGING GAP	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
T801	1-437-090-00	HDT	
T802 ⚠	1-439-418-21	TRANSFORMER ASSY, FLYBACK (UX-1610)	
T803	1-413-059-00	TRANSFORMER, FERRITE (DFT)	
T804	1-459-957-11	TRANSFORMER	
T805	1-421-794-11	TRANSFORMER, FERRITE (PMT)	

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*1-636-577-11 VM BOARD
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*1-564-506-11 PLUG, CONNECTOR 3P
*1-564-507-11 PLUG, CONNECTOR 4P

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C751	1-102-971-00	CERAMIC	82PF	5%	50V	
C752	1-106-349-00	MYLAR	0.0018MF	10%	100V	
C754	1-126-101-11	ELECT	100MF	20%	16V	
C755	1-102-973-00	CERAMIC	100PF	5%	50V	
C756	1-106-367-00	MYLAR	0.01MF	10%	400V	
C758	1-106-367-00	MYLAR	0.01MF	10%	400V	
C760	1-124-925-11	ELECT	2.2MF	20%	50V	
C761	1-106-220-00	MYLAR	0.1MF	10%	100V	
C763	1-124-122-11	ELECT	100MF	20%	35V	
C764	1-126-176-11	ELECT	220MF	20%	6.3V	
C765	1-101-006-00	CERAMIC	0.047MF		50V	
C766	1-124-122-11	ELECT	100MF	20%	35V	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L751	1-408-413-00	INDUCTOR	22UH	
L752	1-408-421-00	INDUCTOR	100UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q751	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q752	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q753	8-729-140-96	TRANSISTOR 2SD774-34	
Q754	8-729-177-22	TRANSISTOR 2SB772-Q	
Q755	8-729-188-23	TRANSISTOR 2SD882-P	
Q756	8-729-107-26	TRANSISTOR 2SD1585-K	
Q757	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R711	1-249-423-11	CARBON	3.3K	5%	1/4W	
R751	1-249-409-11	CARBON	220	5%	1/4W	
R752	1-249-409-11	CARBON	220	5%	1/4W	
R753	1-249-418-11	CARBON	1.2K	5%	1/4W	
R754	1-249-416-11	CARBON	820	5%	1/4W	
R755	1-216-431-11	METAL OXIDE	560	5%	1W	
R756	1-249-414-11	CARBON	560	5%	1/4W	
R757	1-249-426-11	CARBON	5.6K	5%	1/4W	
R758	1-249-435-11	CARBON	33K	5%	1/4W	
R759	1-212-881-11	FUSIBLE	100	5%	1/4W	
R760	1-216-449-11	METAL OXIDE	56	5%	2W	
R764	1-249-409-11	CARBON	220	5%	1/4W	
R765	1-217-637-00	FUSIBLE	1	5%	1/4W	F
R766	1-249-426-11	CARBON	5.6K	5%	1/4W	
R767	1-249-417-11	CARBON	1K	5%	1/4W	
R768	1-249-426-11	CARBON	5.6K	5%	1/4W	
R769	1-249-409-11	CARBON	220	5%	1/4W	
R772	1-212-853-00	FUSIBLE	6.8	5%	1/4W	F
R773	1-249-396-11	CARBON	18	5%	1/4W	
R776	1-217-637-00	FUSIBLE	1	5%	1/4W	F

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*A-1645-009-A V BOARD, COMPLETE
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*4-380-698-01 CASE (MAIN), SHIELD, A1
*4-380-699-01 CASE (UPPER LID), SHIELD, A1

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C02	1-124-120-11	ELECT	220MF	20%	16V	
C03	1-124-119-00	ELECT	330MF	20%	16V	
C05	1-126-101-11	ELECT	100MF	20%	16V	
C06	1-124-120-11	ELECT	220MF	20%	16V	
C07	1-124-791-11	ELECT	1MF	20%	50V	
C08	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	
C09	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	
C10	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C11	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C12	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C13	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C14	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	
C15	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	
C16	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C17	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C18	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	
C19	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C20	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C21	1-163-833-00	CERAMIC CHIP	0.068MF		25V	
C22	1-102-959-00	CERAMIC	22PF	5%	50V	
C24	1-126-101-11	ELECT	100MF	20%	16V	
C25	1-124-477-11	ELECT	47MF	20%	16V	
C27	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C28	1-163-137-00	CERAMIC CHIP	680PF	5%	50V	
C51	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C52	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C53	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C54	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C55	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C56	1-163-038-00	CERAMIC CHIP	0.1MF		25V	

V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C57	1-124-477-11	ELECT	47MF	20%	16V
C58	1-124-477-11	ELECT	47MF	20%	16V
C59	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C60	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
		<CONNECTOR>			
CNV03	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P			
CNV41	*1-565-393-11	CONNECTOR, BOARD TO BOARD			
CNV42	*1-565-393-11	CONNECTOR, BOARD TO BOARD			
		<TRIMMER>			
CT01	1-141-181-11	CAP,TRIMMER			
		<DIODE>			
D01	8-719-105-91	DIODE RD5.6M-B2			
D02	8-719-106-79	DIODE RD13M-B1			
D03	8-719-400-18	DIODE MA152WK			
D07	8-719-106-17	DIODE RD6.8M-B2			
D08	8-719-106-17	DIODE RD6.8M-B2			
D10	8-719-400-18	DIODE MA152WK			
		<IC>			
IC1	8-759-038-58	IC SDA20162-A002			
IC2	8-759-037-64	IC SDA5231-2			
IC3	8-759-032-98	IC SDA5243			
IC4	8-759-230-69	IC TC5563APL-12L			
		<COIL>			
L01	1-408-411-00	INDUCTOR	15UH		
L04	1-408-407-00	INDUCTOR	6.8UH		
L05	1-408-407-00	INDUCTOR	6.8UH		
L06	1-408-407-00	INDUCTOR	6.8UH		
		<IC LINK>			
PS01 ⚠	1-532-679-91	LINK, IC (ICP-N15) 0.6A			
PS02 ⚠	1-532-727-91	LINK, IC 0.25A			
		<TRANSISTOR>			
Q3	8-729-900-53	TRANSISTOR DTC114EK			
Q01	8-729-920-92	TRANSISTOR 2SD2096-EF			
Q02	8-729-807-50	TRANSISTOR 2SD1623-R			
Q04	8-729-271-22	TRANSISTOR 2SC2712-G			
Q05	8-729-807-50	TRANSISTOR 2SD1623-R			
Q07	8-729-900-98	TRANSISTOR DTC143TK			
Q09	8-729-807-87	TRANSISTOR 2SB1295-UL6			
Q10	8-729-807-87	TRANSISTOR 2SB1295-UL6			
Q11	8-729-807-87	TRANSISTOR 2SB1295-UL6			
Q14	8-729-807-87	TRANSISTOR 2SB1295-UL6			
		<RESISTOR>			
JW19	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW20	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW21	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW22	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW23	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW24	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW25	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW26	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW29	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW30	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW31	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW32	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW33	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW34	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW35	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW42	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW43	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW47	1-216-295-00	METAL GLAZE	0	5%	1/10W
R02	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R05	1-216-025-00	METAL GLAZE	100	5%	1/10W
R06	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R07	1-216-025-00	METAL GLAZE	100	5%	1/10W
R08	1-216-037-00	METAL GLAZE	330	5%	1/10W
R09	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R19	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R20	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R27	1-216-013-00	METAL GLAZE	33	5%	1/10W
R28	1-216-013-00	METAL GLAZE	33	5%	1/10W
R29	1-216-013-00	METAL GLAZE	33	5%	1/10W
R30	1-249-406-11	CARBON	120	5%	1/4W
R31	1-249-406-11	CARBON	120	5%	1/4W
R32	1-249-406-11	CARBON	120	5%	1/4W
R33	1-216-023-00	METAL GLAZE	82	5%	1/10W
R34	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R37	1-216-025-00	METAL GLAZE	100	5%	1/10W
R38	1-216-047-00	METAL GLAZE	820	5%	1/10W
R41	1-216-041-00	METAL GLAZE	470	5%	1/10W
R44	1-216-041-00	METAL GLAZE	470	5%	1/10W
R45	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R46	1-216-311-00	METAL GLAZE	6.8	5%	1/10W
R51	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R52	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R53	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R54	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R55	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R56	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R57	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R58	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R59	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R60	1-216-041-00	METAL GLAZE	470	5%	1/10W
R61	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R64	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R65	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R66	1-216-041-00	METAL GLAZE	470	5%	1/10W
R67	1-216-041-00	METAL GLAZE	470	5%	1/10W
R78	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R79	1-249-410-11	CARBON	270	5%	1/4W
R80	1-249-410-11	CARBON	270	5%	1/4W
		<VARIABLE RESISTOR>			
RV01	1-238-012-11	RES, ADJ, CARBON 1K			
		<CRYSTAL>			
X01	1-567-162-00	OSCILLATOR, CRYSTAL			
X02	1-567-495-11	OSCILLATOR, CRYSTAL			
X03	1-577-364-11	VIBRATOR, CERAMIC			

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REF.NO.	PART NO.	DESCRIPTION				REMARK
	*1-636-575-11	H1 BOARD				
		********				
	1-562-837-11	JACK				
	*1-564-507-11	PLUG, CONNECTOR 4P				
	*1-564-595-11	PLUG, CONNECTOR 14P				
	1-565-639-11	JACK, PIN 1P				
	1-565-641-11	JACK, PIN 1P				
	1-565-666-12	TERMINAL, S 4P				
	1-580-322-11	JACK, PIN (WITH SW)				
		<CAPACITOR>				
C901	1-101-004-00	CERAMIC	0.01MF		50V	
C902	1-101-004-00	CERAMIC	0.01MF		50V	
C903	1-102-114-00	CERAMIC	470PF	10%	50V	
C904	1-102-114-00	CERAMIC	470PF	10%	50V	
		<RESISTOR>				
R901	1-249-405-11	CARBON	100	5%	1/4W	
R902	1-249-405-11	CARBON	100	5%	1/4W	
		<SWITCH>				
S901	1-571-532-21	SWITCH, TACTIL				
S902	1-571-532-21	SWITCH, TACTIL				
S903	1-571-532-21	SWITCH, TACTIL				
**						
	*1-636-576-11	H2 BOARD				
		********				
	*1-564-510-11	PLUG, CONNECTOR 7P				
	*4-201-076-01	HOLDER, LED				
	*4-374-987-01	GUIDE, LIGHT				
	*4-381-686-01	BRACKET (B), LIGHT GUIDE				
		<DIODE>				
D951	8-719-948-31	DIODE LD-201VR				
D952	8-719-948-31	DIODE LD-201VR				
D954	8-719-948-31	DIODE LD-201VR				
		<IC>				
IC951	8-741-138-70	IC BX-1387				
		<RESISTOR>				
R951	1-249-413-11	CARBON	470	5%	1/4W	
**						
	*A-1649-001-A	K BOARD, COMPLETE				
		*****************				
	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P				
	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P				
	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P				
	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)				
	*1-564-104-00	PIN, CONNECTOR 3P				
	*1-564-507-11	PLUG, CONNECTOR 4P				
	*1-564-508-11	PLUG, CONNECTOR 5P				
	*1-564-509-11	PLUG, CONNECTOR 6P				
	*1-564-510-11	PLUG, CONNECTOR 7P				
	*1-564-515-11	PLUG, CONNECTOR 12P				
	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR				
	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)				
	4-200-001-01	HOLDER, IC				
	4-201-023-01	SPACER, INSULATING				
	*4-380-699-01	CASE (UPPER LID), SHIELD, A1				
	4-812-134-00	RIVET NYLON, 3.5				
		<CAPACITOR>				
C1002	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C1003	1-123-875-11	ELECT	10MF	20%	50V	
C1004	1-124-120-11	ELECT	220MF	20%	16V	
C1005	1-124-791-11	ELECT	1MF	20%	50V	
C1010	1-124-120-11	ELECT	220MF	20%	16V	
C1011	1-101-004-00	CERAMIC	0.01MF		50V	
C1012	1-101-004-00	CERAMIC	0.01MF		50V	
C1013	1-106-220-00	MYLAR	0.1MF	10%	100V	
C1014	1-106-220-00	MYLAR	0.1MF	10%	100V	
C1015	1-124-902-00	ELECT	0.47MF	20%	50V	
C1016	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C1017	1-106-220-00	MYLAR	0.1MF	10%	100V	
C1018	1-102-980-00	CERAMIC	270PF	5%	50V	
C1019	1-106-383-00	MYLAR	0.047MF	10%	100V	
C1020	1-124-917-11	ELECT	33MF	20%	50V	
C1021	1-102-973-00	CERAMIC	100PF	5%	50V	
C1022	1-101-004-00	CERAMIC	0.01MF		50V	
C1023	1-102-973-00	CERAMIC	100PF	5%	50V	
C1024	1-102-973-00	CERAMIC	100PF	5%	50V	
C1025	1-102-973-00	CERAMIC	100PF	5%	50V	
C1026	1-124-917-11	ELECT	33MF	20%	50V	
C1027	1-123-875-11	ELECT	10MF	20%	50V	
C1036	1-124-927-11	ELECT	4.7MF	20%	50V	
C1098	1-124-360-00	ELECT	1000MF	20%	16V	
C1099	1-124-360-00	ELECT	1000MF	20%	16V	
C1250	1-123-875-11	ELECT	10MF	20%	50V	
C1251	1-124-925-11	ELECT	2.2MF	20%	50V	
C1252	1-126-233-11	ELECT	22MF	20%	50V	
C1253	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C1254	1-106-220-00	MYLAR	0.1MF	10%	100V	
C1255	1-124-637-11	ELECT	1000MF	20%	50V	
C1256	1-124-925-11	ELECT	2.2MF	20%	50V	
C1257	1-124-607-11	ELECT	2200MF	20%	50V	
C1260	1-123-875-11	ELECT	10MF	20%	50V	
C1261	1-124-925-11	ELECT	2.2MF	20%	50V	
C1262	1-126-233-11	ELECT	22MF	20%	50V	
C1263	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C1264	1-106-220-00	MYLAR	0.1MF	10%	100V	
C1266	1-124-925-11	ELECT	2.2MF	20%	50V	
C1267	1-124-607-11	ELECT	2200MF	20%	50V	
C1901	1-102-973-00	CERAMIC	100PF	5%	50V	
C1902	1-102-973-00	CERAMIC	100PF	5%	50V	
C1903	1-102-973-00	CERAMIC	100PF	5%	50V	
C1904	1-102-973-00	CERAMIC	100PF	5%	50V	
C1905	1-102-973-00	CERAMIC	100PF	5%	50V	
C1907	1-102-973-00	CERAMIC	100PF	5%	50V	
C1908	1-102-973-00	CERAMIC	100PF	5%	50V	
C1909	1-124-927-11	ELECT	4.7MF	20%	50V	
		<FILTER>				
CF1001	1-577-364-11	VIBRATOR, CERAMIC				

K

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
<NETWORK>						
CP1001	1-236-841-11	NETWORK, C				
CP1002	1-236-967-11	NETWORK, RES, THICK FILM				
<DIODE>						
D1001	8-719-911-19	DIODE 1SS119				
D1002	8-719-109-98	DIODE RD6.8ES-B3				
D1003	8-719-911-19	DIODE 1SS119				
D1005	8-719-109-89	DIODE RD5.6ES-B2				
D1006	8-719-109-71	DIODE RD3.9ES-B1				
D1007	1-124-925-11	ELECT	2.2MF	20%	50V	
D1008	8-719-421-09	DIODE MA723				
D1009	8-719-109-89	DIODE RD5.6ES-B2				
D1010	8-719-109-93	DIODE RD6.2ES-B2				
D1011	8-719-109-93	DIODE RD6.2ES-B2				
D1012	8-719-911-19	DIODE 1SS119				
D1013	8-719-911-19	DIODE 1SS119				
D1024	8-719-110-76	DIODE RD33ES-B1				
D1025	8-719-110-54	DIODE RD20ES-B3				
<IC>						
IC1001	8-759-512-68	IC SDA20560A-007				
IC1003	8-759-945-58	IC RC4558P				
IC1004	8-759-208-06	IC TC4051BPHB				
IC1005	8-759-748-56	IC SDA2546				
IC1006	8-759-208-06	IC TC4051BPHB				
IC1007	8-759-208-10	IC TC4053BPHB				
IC1099	8-759-502-23	IC L78S05CV				
IC1251	8-759-988-94	IC TDA2050				
IC1261	8-759-988-94	IC TDA2050				
<COIL>						
L1099	1-410-397-21	FERRITE BEAD INDUCTOR				
<IC LINK>						
PS1099⚠	1-532-984-91	LINK, IC (ICP-N50) 2A				
<TRANSISTOR>						
Q1001	8-729-900-89	TRANSISTOR DTC144ES				
Q1002	8-729-900-89	TRANSISTOR DTC144ES				
Q1003	8-729-173-38	TRANSISTOR 2SA733-K				
Q1004	8-729-173-38	TRANSISTOR 2SA733-K				
Q1005	8-729-900-89	TRANSISTOR DTC144ES				
Q1006	8-729-900-89	TRANSISTOR DTC144ES				
Q1007	8-729-900-89	TRANSISTOR DTC144ES				
Q1008	8-729-900-89	TRANSISTOR DTC144ES				
Q1009	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1010	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1060	8-729-900-89	TRANSISTOR DTC144ES				
Q1061	8-729-900-89	TRANSISTOR DTC144ES				
Q1251	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1261	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1901	8-729-173-38	TRANSISTOR 2SA733-K				
<RESISTOR>						
R1001	1-249-413-11	CARBON	470	5%	1/4W	
R1002	1-249-413-11	CARBON	470	5%	1/4W	
R1004	1-249-417-11	CARBON	1K	5%	1/4W	
R1005	1-249-417-11	CARBON	1K	5%	1/4W	
R1006	1-249-429-11	CARBON	10K	5%	1/4W	
R1007	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1008	1-249-429-11	CARBON	10K	5%	1/4W	
R1009	1-249-429-11	CARBON	10K	5%	1/4W	
R1010	1-249-413-11	CARBON	470	5%	1/4W	
R1011	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1012	1-249-429-11	CARBON	10K	5%	1/4W	
R1013	1-249-429-11	CARBON	10K	5%	1/4W	
R1014	1-249-435-11	CARBON	33K	5%	1/4W	
R1015	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1016	1-249-435-11	CARBON	33K	5%	1/4W	
R1017	1-249-436-11	CARBON	39K	5%	1/4W	
R1018	1-249-440-11	CARBON	82K	5%	1/4W	
R1019	1-249-405-11	CARBON	100	5%	1/4W	
R1020	1-249-405-11	CARBON	100	5%	1/4W	
R1021	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1022	1-249-429-11	CARBON	10K	5%	1/4W	
R1023	1-249-433-11	CARBON	22K	5%	1/4W	
R1024	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R1025	1-249-405-11	CARBON	100	5%	1/4W	
R1026	1-249-417-11	CARBON	1K	5%	1/4W	
R1027	1-249-405-11	CARBON	100	5%	1/4W	
R1028	1-249-405-11	CARBON	100	5%	1/4W	
R1029	1-249-429-11	CARBON	10K	5%	1/4W	
R1030	1-249-429-11	CARBON	10K	5%	1/4W	
R1031	1-249-433-11	CARBON	22K	5%	1/4W	
R1032	1-249-429-11	CARBON	10K	5%	1/4W	
R1033	1-249-429-11	CARBON	10K	5%	1/4W	
R1034	1-249-431-11	CARBON	15K	5%	1/4W	
R1035	1-249-433-11	CARBON	22K	5%	1/4W	
R1036	1-249-434-11	CARBON	27K	5%	1/4W	
R1037	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1038	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1039	1-249-433-11	CARBON	22K	5%	1/4W	
R1040	1-249-431-11	CARBON	15K	5%	1/4W	
R1041	1-249-429-11	CARBON	10K	5%	1/4W	
R1042	1-249-417-11	CARBON	1K	5%	1/4W	
R1043	1-249-413-11	CARBON	470	5%	1/4W	
R1044	1-249-441-11	CARBON	100K	5%	1/4W	
R1045	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1046	1-249-440-11	CARBON	82K	5%	1/4W	
R1047	1-249-429-11	CARBON	10K	5%	1/4W	
R1048	1-249-429-11	CARBON	10K	5%	1/4W	
R1049	1-249-429-11	CARBON	10K	5%	1/4W	
R1050	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1051	1-249-413-11	CARBON	470	5%	1/4W	
R1052	1-249-417-11	CARBON	1K	5%	1/4W	
R1053	1-249-417-11	CARBON	1K	5%	1/4W	
R1054	1-249-417-11	CARBON	1K	5%	1/4W	
R1055	1-249-411-11	CARBON	330	5%	1/4W	
R1056	1-249-417-11	CARBON	1K	5%	1/4W	
R1057	1-249-417-11	CARBON	1K	5%	1/4W	
R1058	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1059	1-249-417-11	CARBON	1K	5%	1/4W	
R1060	1-249-417-11	CARBON	1K	5%	1/4W	
R1061	1-249-417-11	CARBON	1K	5%	1/4W	
R1062	1-249-429-11	CARBON	10K	5%	1/4W	
R1063	1-249-417-11	CARBON	1K	5%	1/4W	
R1064	1-249-413-11	CARBON	470	5%	1/4W	
R1065	1-249-417-11	CARBON	1K	5%	1/4W	
R1066	1-249-413-11	CARBON	470	5%	1/4W	
R1067	1-249-413-11	CARBON	470	5%	1/4W	
R1068	1-249-405-11	CARBON	100	5%	1/4W	
R1069	1-249-405-11	CARBON	100	5%	1/4W	
R1070	1-249-417-11	CARBON	1K	5%	1/4W	
R1071	1-249-417-11	CARBON	1K	5%	1/4W	
R1072	1-249-417-11	CARBON	1K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1073	1-249-417-11	CARBON	1K	5%	1/4W	
R1074	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1075	1-249-409-11	CARBON	220	5%	1/4W	
R1076	1-249-429-11	CARBON	10K	5%	1/4W	
R1077	1-249-417-11	CARBON	1K	5%	1/4W	
R1081	1-249-417-11	CARBON	1K	5%	1/4W	
R1082	1-249-429-11	CARBON	10K	5%	1/4W	
R1083	1-249-429-11	CARBON	10K	5%	1/4W	
R1084	1-249-429-11	CARBON	10K	5%	1/4W	
R1085	1-249-429-11	CARBON	10K	5%	1/4W	
R1086	1-249-429-11	CARBON	10K	5%	1/4W	
R1087	1-249-429-11	CARBON	10K	5%	1/4W	
R1093	1-249-429-11	CARBON	10K	5%	1/4W	
R1094	1-249-429-11	CARBON	10K	5%	1/4W	
R1098	1-249-417-11	CARBON	1K	5%	1/4W	
R1099	1-249-417-11	CARBON	1K	5%	1/4W	
R1250	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R1251	1-249-441-11	CARBON	100K	5%	1/4W	
R1252	1-249-412-11	CARBON	390	5%	1/4W	
R1253	1-249-429-11	CARBON	10K	5%	1/4W	
R1254	1-216-357-00	METAL OXIDE	4.7	5%	1W	F
R1255	1-249-429-11	CARBON	10K	5%	1/4W	
R1257	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1258	1-215-869-11	METAL OXIDE	1K	5%	1W	
R1259	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1261	1-249-441-11	CARBON	100K	5%	1/4W	
R1262	1-249-412-11	CARBON	390	5%	1/4W	
R1263	1-249-429-11	CARBON	10K	5%	1/4W	
R1264	1-216-357-00	METAL OXIDE	4.7	5%	1W	F
R1265	1-249-429-11	CARBON	10K	5%	1/4W	
R1266	1-249-441-11	CARBON	100K	5%	1/4W	
R1267	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1268	1-215-869-11	METAL OXIDE	1K	5%	1W	
R1269	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1274	1-249-441-11	CARBON	100K	5%	1/4W	
R1275	1-249-439-11	CARBON	68K	5%	1/4W	
R1276	1-249-435-11	CARBON	33K	5%	1/4W	
R1284	1-249-441-11	CARBON	100K	5%	1/4W	
R1285	1-249-439-11	CARBON	68K	5%	1/4W	
R1286	1-249-435-11	CARBON	33K	5%	1/4W	
R1901	1-249-429-11	CARBON	10K	5%	1/4W	
R1902	1-249-429-11	CARBON	10K	5%	1/4W	
R1904	1-249-429-11	CARBON	10K	5%	1/4W	
R1907	1-249-429-11	CARBON	10K	5%	1/4W	
R1908	1-249-429-11	CARBON	10K	5%	1/4W	
R1909	1-249-429-11	CARBON	10K	5%	1/4W	
R1910	1-249-429-11	CARBON	10K	5%	1/4W	
R1911	1-249-429-11	CARBON	10K	5%	1/4W	
R1912	1-249-429-11	CARBON	10K	5%	1/4W	
R1913	1-249-417-11	CARBON	1K	5%	1/4W	
R1920	1-249-411-11	CARBON	330	5%	1/4W	
R1921	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1922	1-249-428-11	CARBON	8.2K	5%	1/4W	

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*A-1651-013-A J BOARD, COMPLETE
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REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-536-996-21	TERMINAL BOARD, INPUT/OUTPUT	
	*1-560-278-00	PLUG, CONNECTOR 3P	
	1-561-534-41	SOCKET 21P	
	*1-564-505-11	PLUG, CONNECTOR 2P	
	*1-564-519-11	PLUG, CONNECTOR 4P	
	*1-564-593-11	PLUG, CONNECTOR 14P	
	1-565-931-11	TERMINAL BLOCK, S 3P	
	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C201	1-126-103-11	ELECT	470MF	20%	16V	
C203	1-124-925-11	ELECT	2.2MF	20%	50V	
C205	1-124-927-11	ELECT	4.7MF	20%	50V	
C206	1-124-925-11	ELECT	2.2MF	20%	50V	
C207	1-124-927-11	ELECT	4.7MF	20%	50V	
C209	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V	
C210	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V	
C213	1-126-233-11	ELECT	22MF	20%	50V	
C214	1-106-363-00	MYLAR	0.0068MF	10%	400V	
C217	1-106-363-00	MYLAR	0.0068MF	10%	400V	
C218	1-106-375-12	MYLAR	0.022MF	10%	250V	
C219	1-106-375-12	MYLAR	0.022MF	10%	250V	
C220	1-108-686-11	MYLAR	0.0033MF	10%	100V	
C221	1-108-686-11	MYLAR	0.0033MF	10%	100V	
C222	1-106-385-00	MYLAR	0.056MF	10%	100V	
C223	1-106-385-00	MYLAR	0.056MF	10%	100V	
C224	1-106-367-00	MYLAR	0.01MF	10%	400V	
C225	1-136-173-00	FILM	0.47MF	5%	50V	
C226	1-136-173-00	FILM	0.47MF	5%	50V	
C227	1-106-375-12	MYLAR	0.022MF	10%	250V	
C228	1-106-379-12	MYLAR	0.033MF	10%	250V	
C229	1-106-371-00	MYLAR	0.015MF	10%	400V	
C230	1-106-371-00	MYLAR	0.015MF	10%	400V	
C231	1-124-902-00	ELECT	0.47MF	20%	50V	
C232	1-123-875-11	ELECT	10MF	20%	50V	
C233	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C234	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C235	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C236	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C237	1-124-902-00	ELECT	0.47MF	20%	50V	
C238	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C239	1-126-103-11	ELECT	470MF	20%	16V	
C240	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C241	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C242	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C243	1-106-228-00	MYLAR	0.22MF	10%	100V	
C244	1-106-228-00	MYLAR	0.22MF	10%	100V	
C245	1-106-228-00	MYLAR	0.22MF	10%	100V	
C246	1-106-228-00	MYLAR	0.22MF	10%	100V	
C247	1-124-902-00	ELECT	0.47MF	20%	50V	
C248	1-124-902-00	ELECT	0.47MF	20%	50V	
C249	1-124-902-00	ELECT	0.47MF	20%	50V	
C250	1-124-925-11	ELECT	2.2MF	20%	50V	
C251	1-124-925-11	ELECT	2.2MF	20%	50V	
C252	1-106-375-12	MYLAR	0.022MF	10%	250V	
C253	1-106-375-12	MYLAR	0.022MF	10%	250V	
C254	1-124-925-11	ELECT	2.2MF	20%	50V	
C255	1-124-925-11	ELECT	2.2MF	20%	50V	
C256	1-106-371-00	MYLAR	0.015MF	10%	400V	
C257	1-106-371-00	MYLAR	0.015MF	10%	400V	
C258	1-106-220-00	MYLAR	0.1MF	10%	100V	
C259	1-106-220-00	MYLAR	0.1MF	10%	100V	
C260	1-123-875-11	ELECT	10MF	20%	50V	
C261	1-123-875-11	ELECT	10MF	20%	50V	
C262	1-126-103-11	ELECT	470MF	20%	16V	
C263	1-126-103-11	ELECT	470MF	20%	16V	
C265	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C266	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C267	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C268	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C269	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C270	1-106-216-00	MYLAR	0.068MF	10%	100V
C271	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C272	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C273	1-102-961-00	CERAMIC	27PF	5%	50V
C280	1-106-375-12	MYLAR	0.022MF	10%	250V
C281	1-106-375-12	MYLAR	0.022MF	10%	250V
C282	1-102-114-00	CERAMIC	470PF	10%	50V
C1401	1-124-120-11	ELECT	220MF	20%	16V
C1402	1-126-103-11	ELECT	470MF	20%	16V
C1403	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1404	1-106-220-00	MYLAR	0.1MF	10%	100V
C1405	1-136-017-00	CERAMIC CHIP	0.0047MF		50V
C1406	1-106-220-00	MYLAR	0.1MF	10%	100V
C1407	1-124-910-11	ELECT	47MF	20%	50V
C1408	1-124-122-11	ELECT	100MF	20%	50V
C1409	1-126-233-11	ELECT	22MF	20%	50V
C1410	1-123-875-11	ELECT	10MF	20%	50V
C1411	1-123-875-11	ELECT	10MF	20%	50V
C1412	1-124-910-11	ELECT	47MF	20%	50V
C1413	1-124-910-11	ELECT	47MF	20%	50V
C1414	1-123-875-11	ELECT	10MF	20%	50V
C1415	1-106-220-00	MYLAR	0.1MF	10%	100V
C1416	1-106-220-00	MYLAR	0.1MF	10%	100V
C1417	1-124-120-11	ELECT	220MF	20%	16V
C1418	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1419	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1425	1-124-902-00	ELECT	0.47MF	20%	50V
C1426	1-124-902-00	ELECT	0.47MF	20%	50V
C1427	1-136-017-00	CERAMIC CHIP	0.0047MF		50V
C1428	1-136-017-00	CERAMIC CHIP	0.0047MF		50V
C1429	1-136-017-00	CERAMIC CHIP	0.0047MF		50V
C1430	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1431	1-126-529-11	ELECT	0.47MF	20%	50V
C1432	1-124-902-00	ELECT	0.47MF	20%	50V
C1433	1-124-122-11	ELECT	100MF	20%	50V
C1439	1-106-367-00	MYLAR	0.01MF	10%	400V
C1444	1-124-910-11	ELECT	47MF	20%	50V
C1801	1-124-790-11	ELECT	0.47MF	20%	100V
C1802	1-124-790-11	ELECT	0.47MF	20%	100V
C1803	1-124-790-11	ELECT	0.47MF	20%	100V
C1804	1-124-790-11	ELECT	0.47MF	20%	100V
C1807	1-106-220-00	MYLAR	0.1MF	10%	100V
C1808	1-124-910-11	ELECT	47MF	20%	50V
C1809	1-124-910-11	ELECT	47MF	20%	50V
C1810	1-124-477-11	ELECT	47MF	20%	16V
C1811	1-106-367-00	MYLAR	0.01MF	10%	400V
C1812	1-126-101-11	ELECT	100MF	20%	16V
C1813	1-124-477-11	ELECT	47MF	20%	16V
C1814	1-106-367-00	MYLAR	0.01MF	10%	400V
C1816	1-126-101-11	ELECT	100MF	20%	16V
C1817	1-124-910-11	ELECT	47MF	20%	50V
C1818	1-124-910-11	ELECT	47MF	20%	50V
C1820	1-124-910-11	ELECT	47MF	20%	50V

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D201	8-719-110-14	DIODE RD9.1ES-B3
D202	8-719-110-14	DIODE RD9.1ES-B3
D205	8-719-110-04	DIODE RD7.5ES-B3
D206	8-719-110-04	DIODE RD7.5ES-B3
D208	8-719-110-04	DIODE RD7.5ES-B3
D209	8-719-110-04	DIODE RD7.5ES-B3
D210	8-719-110-04	DIODE RD7.5ES-B3
D212	8-719-110-04	DIODE RD7.5ES-B3
D1401	8-719-110-04	DIODE RD7.5ES-B3
D1403	8-719-110-04	DIODE RD7.5ES-B3
D1404	8-719-110-04	DIODE RD7.5ES-B3
D1405	8-719-110-04	DIODE RD7.5ES-B3
D1406	8-719-110-04	DIODE RD7.5ES-B3
D1407	8-719-110-18	DIODE RD10ES-B3
D1408	8-719-110-14	DIODE RD9.1ES-B3
D1409	8-719-110-14	DIODE RD9.1ES-B3
D1410	8-719-110-14	DIODE RD9.1ES-B3
D1415	8-719-110-04	DIODE RD7.5ES-B3
D1418	8-719-110-04	DIODE RD7.5ES-B3
D1419	8-719-110-04	DIODE RD7.5ES-B3
D1420	8-719-110-04	DIODE RD7.5ES-B3
D1426	8-719-110-04	DIODE RD7.5ES-B3
D1801	8-719-110-04	DIODE RD7.5ES-B3
D1802	8-719-110-04	DIODE RD7.5ES-B3
D1803	8-719-110-04	DIODE RD7.5ES-B3
D1804	8-719-110-04	DIODE RD7.5ES-B3
D1805	8-719-110-04	DIODE RD7.5ES-B3
D1806	8-719-110-04	DIODE RD7.5ES-B3

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC201	8-759-013-17	IC TDA6200
IC202	8-759-208-08	IC TC4052BPHB
IC203	8-759-502-22	IC TDA7303
IC204	8-759-502-21	IC TDA2822M
IC1401	8-752-032-27	IC CXA1114P
IC1402	8-759-946-32	IC TEA2014A
IC1403	8-759-040-53	IC MC14053BCP
IC1404	8-759-998-02	IC TEA5114A
IC1405	8-759-208-08	IC TC4052BPHB

<COIL>

REF.NO.	PART NO.	DESCRIPTION	
L201	1-408-427-00	INDUCTOR	330UH
L1801	1-408-409-00	INDUCTOR	10UH

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q201	8-729-271-22	TRANSISTOR 2SC2712-G
Q202	8-729-271-22	TRANSISTOR 2SC2712-G
Q1401	8-729-216-22	TRANSISTOR 2SA1162-G
Q1402	8-729-271-22	TRANSISTOR 2SC2712-G
Q1403	8-729-271-22	TRANSISTOR 2SC2712-G
Q1404	8-729-216-22	TRANSISTOR 2SA1162-G
Q1406	8-729-216-22	TRANSISTOR 2SA1162-G
Q1407	8-729-216-22	TRANSISTOR 2SA1162-G
Q1408	8-729-216-22	TRANSISTOR 2SA1162-G
Q1409	8-729-216-22	TRANSISTOR 2SA1162-G
Q1410	8-729-271-22	TRANSISTOR 2SC2712-G

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
JW88	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW89	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW90	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW92	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW93	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW102	1-216-041-00	METAL GLAZE	470	5%	1/10W
JW123	1-216-295-00	METAL GLAZE	0	5%	1/10W
R202	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R203	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R204	1-216-085-00	METAL GLAZE	33K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION				REMARK
R205	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R206	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R207	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R208	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R209	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R210	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R211	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R212	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R213	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R214	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R215	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R216	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R217	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R218	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R219	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R220	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R221	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R222	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R223	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R224	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R225	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R226	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R227	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R228	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R229	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R231	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R232	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R233	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R234	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R235	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R236	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R237	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R238	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R239	1-247-688-11	CARBON	10	5%	1/4W	F
R240	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R241	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R242	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R243	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R244	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R245	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R246	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R247	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R248	1-216-246-00	METAL GLAZE	100K	5%	1/8W	
R250	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R251	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R252	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R253	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R254	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R255	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R256	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R257	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R258	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R259	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R260	1-247-734-11	CARBON	39	5%	1/2W	
R261	1-247-734-11	CARBON	39	5%	1/2W	
R262	1-217-637-00	FUSIBLE	1	5%	1/4W	F
R270	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R271	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R272	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R273	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R274	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R275	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R276	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R277	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1401	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R1402	1-216-170-00	METAL GLAZE	68	5%	1/8W	
R1403	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1404	1-216-178-00	METAL GLAZE	150	5%	1/8W	
R1405	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1407	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1408	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1410	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1411	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1412	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1413	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1414	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1415	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1416	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1417	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1418	1-247-738-11	CARBON	82	5%	1/2W	F
R1422	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1423	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1424	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1425	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1426	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1427	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1428	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1429	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1430	1-216-170-00	METAL GLAZE	68	5%	1/8W	
R1431	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1432	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1433	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1434	1-247-688-11	CARBON	10	5%	1/4W	F
R1435	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1436	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1437	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1439	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R1440	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1441	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1442	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1443	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1444	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1445	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R1446	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1447	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1448	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1452	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1453	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1454	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R1455	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R1457	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1459	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1460	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1461	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1462	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1463	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1464	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1467	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1468	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1469	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1470	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1482	1-216-178-00	METAL GLAZE	150	5%	1/8W	
R1483	1-216-178-00	METAL GLAZE	150	5%	1/8W	
R1484	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1485	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1486	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1487	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	

J **G**

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1488	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1489	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1801	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R1802	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R1803	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R1804	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R1805	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R1806	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R1807	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1808	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1809	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1810	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1811	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1812	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R1813	1-216-186-00	METAL GLAZE	330	5%	1/8W	
R1814	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1815	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1816	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R1817	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1818	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1819	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1820	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1821	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1822	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1823	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1824	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R1825	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1826	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1827	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1828	1-216-186-00	METAL GLAZE	330	5%	1/8W	
R1829	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1831	1-216-073-00	METAL GLAZE	10K	5%	1/10W	

<SWITCH>

S1801	1-570-145-11	SWITCH, SLIDE

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⚠1-413-583-11 G BOARD (ZD-113)

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<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C601	1-136-721-21	FILM	1.5MF	10%	400V	
C602	1-136-725-11	FILM	0.039MF	5%	1.25KV	
C603	1-136-725-11	FILM	0.039MF	5%	1.25KV	
C604	1-130-325-11	FILM	0.15MF	5%	100V	
C605	1-130-325-11	FILM	0.15MF	5%	100V	
C606	1-164-143-11	CERAMIC	1000PF	10%	1KV	
C607	1-164-143-11	CERAMIC	1000PF	10%	1KV	
C608	1-164-143-11	CERAMIC	1000PF	10%	1KV	
C609	1-164-144-11	CERAMIC	1500PF	10%	1KV	
C610	1-164-143-11	CERAMIC	1000PF	10%	1KV	
C611	1-102-038-00	CERAMIC	1000PF		500V	
C612	1-108-843-11	MYLAR	0.033MF	10%	50V	
C613	1-124-477-11	ELECT	47MF	20%	16V	
C614	1-126-176-11	ELECT	220MF	20%	6.3V	
C615	1-123-380-00	ELECT	1MF	20%	50V	
C616	1-124-557-11	ELECT	1000MF	20%	25V	
C618	1-124-439-11	ELECT	2700MF	20%	25V	
C619	1-124-557-11	ELECT	1000MF	20%	25V	
C620	1-124-568-00	ELECT	4700MF	20%	10V	
C621	1-124-347-00	ELECT	100MF	20%	160V	
C622	1-130-495-00	MYLAR	0.1MF	10%	50V	
C624	1-124-471-00	ELECT	1000MF	20%	6.3V	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D601	8-719-500-69	DIODE S3V10SS	
D602	8-719-500-69	DIODE S3V10SS	
D603	8-719-500-26	DIODE D5KD20H	
D605	8-719-510-13	DIODE D10SC4MR	
D606	8-719-510-12	DIODE D10SC4M	
D607	8-719-300-33	DIODE RU-3AM	
D608	8-719-300-33	DIODE RU-3AM	
D609	8-719-500-67	DIODE D5KC40H	
D610	8-719-911-19	DIODE 1SS119	
D611	8-719-911-19	DIODE 1SS119	
D612	8-719-911-19	DIODE 1SS119	
D613	8-719-911-19	DIODE 1SS119	
D615	8-719-801-95	DIODE 2GWJ42	
D616	8-719-911-55	DIODE U05G	
D617	8-719-110-50	DIODE RD18ES-B3	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
G1	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
G2	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P	
G3	*1-564-507-11	PLUG, CONNECTOR 4P	
G4	*1-564-506-11	PLUG, CONNECTOR 3P	

<MODULE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC601	1-236-237-11	POWER MODULE (DM-38)	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L603	1-408-300-00	INDUCTOR	6.80UH	
L604	1-421-329-00	COIL, CHOKE		
L605	1-410-397-21	FERRITE BEAD INDUCTOR	1.10UH	
L606	1-410-397-21	FERRITE BEAD INDUCTOR	1.10UH	
L607	1-410-397-21	FERRITE BEAD INDUCTOR	1.10UH	
L609	1-410-396-41	FERRITE BEAD INDUCTOR	0.45UH	
L610	1-410-396-41	FERRITE BEAD INDUCTOR	0.45UH	
L613	1-410-397-21	FERRITE BEAD INDUCTOR	1.10UH	
L615	1-459-155-00	COIL (WITH CORE) 45UH		
L616	1-421-329-00	COIL, CHOKE		
L617	1-421-329-00	COIL, CHOKE		
L618	1-459-155-00	COIL (WITH CORE) 45UH		

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q601	8-729-905-72	TRANSISTOR 2SC4056P	
Q602	8-729-905-72	TRANSISTOR 2SC4056P	
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R601	1-215-904-11	METAL OXIDE	100K	5%	2W	F
R602	1-215-904-11	METAL OXIDE	100K	5%	2W	F
R605	1-207-451-00	WIREWOUND	0.1	10%	1/2W	
R606	1-207-451-00	WIREWOUND	0.1	10%	1/2W	
R607	1-216-370-11	METAL OXIDE	1.2	5%	2W	F
R608	1-216-370-11	METAL OXIDE	1.2	5%	2W	F
R609	1-249-405-11	CARBON	100	5%	1/4W	F
R610	1-249-405-11	CARBON	100	5%	1/4W	F
R611	1-249-417-11	CARBON	1K	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R612	1-249-382-11	CARBON	1.2	5%	1/4W	F
R613	1-249-398-11	CARBON	27	5%	1/4W	F
R614	1-249-405-11	CARBON	100	5%	1/4W	F
R615	1-216-363-00	METAL OXIDE	0.33	5%	2W	F
R616	1-216-363-00	METAL OXIDE	0.33	5%	2W	F
R617	1-216-343-00	WIREWOUND	0.33	10%	1/2W	
R618	1-207-451-00	WIREWOUND	0.1	10%	1/2W	
R619	1-249-417-11	CARBON	1K	5%	1/4W	
R620	1-249-407-11	CARBON	150	5%	1/4W	F
R621	1-249-405-11	CARBON	100	5%	1/4W	F
R622	1-207-451-00	WIREWOUND	0.1	10%	1/2W	
R623	1-216-341-11	WIREWOUND	0.22	10%	1/2W	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION
T601	1-424-023-11	TRANSFORMER, LINE FILTER
T602	⚠ 1-424-147-11	TRANSFORMER, POWER REGULATION
T603	⚠ 1-450-273-11	TRANSFORMER, POWER INSULATED

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MISCELLANEOUS
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REF.NO.	PART NO.	DESCRIPTION
	⚠ 1-237-614-12	RESISTOR ASSY, HIGH-VOLTAGE
	⚠ 1-417-175-12	RF SPLITTER
	⚠ 1-426-433-21	COIL, DEMAGNETIZATION
	⚠ 1-451-315-11	DEFLECTION YOKE (Y34FXA)
	1-452-032-00	MAGNET, DISK; 10MM ϕ
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ
	⚠ 1-452-468-11	NECK ASSY, PICTURE TUBE (NA321)
	1-543-619-11	CORE, RING
	*1-558-539-21	CABLE, P-P
	⚠ 1-563-204-13	SOCKET, ANTENNA (PAL/SECAM)
	⚠ 1-575-487-11	CORD, POWER (WITH NOISE FILTER)
	1-590-127-11	CABLE, PIN
V901	⚠ 8-733-723-05	PICTURE TUBE (A80JYV50X)

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ACCESSORIES AND PACKING MATERIALS
`**********************************`

PART NO.	DESCRIPTION	REMARK
*A-1678-023-A	BOX ASSY (RIGHT), SPEAKER	
*A-1678-024-A	BOX ASSY (LEFT), SPEAKER	
A-1678-025-A	BOX COMPLETE ASSY, WOOFER	
X-4200-058-1	CUSHION ASSY, FRONT	
X-4200-060-1	SPACER ASSY, SIDE(R)	
X-4200-061-1	SPACER ASSY, SIDE(L)	
X-4374-104-1	SCREW (B) ASSY, ORNAMENTAL	
1-465-618-11	REMOTE COMMANDER (RM-811)	
*3-704-280-01	BAG, PROTECTION (STANDARD)	
*3-704-283-01	BAG (STANDARD), PROTECTION	
*4-200-451-01	CUSHION (UPPER) (ASSY)	
*4-200-452-01	CUSHION (LOWER)	
*4-200-453-01	INDIVIDUAL CARTON	
*4-200-454-01	PALLET	
*4-200-456-01	TRAY	
4-200-458-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/ GERMAN/DUTCH/PORTUGUESE)	
*4-388-135-01	BAG, PROTECTION	
*4-396-077-01	JOINT	

MEMO

ACCESSORY

RM-811

SPECIFICATIONS

Remote control system	infrared control
Power requirements	3 V dc 2 batteries IEC designation R 6 (size AA)
Dimentions	Approx. 98 × 36 × 171.1 mm
Weight	Approx. 225 g (8 oz) including batteries

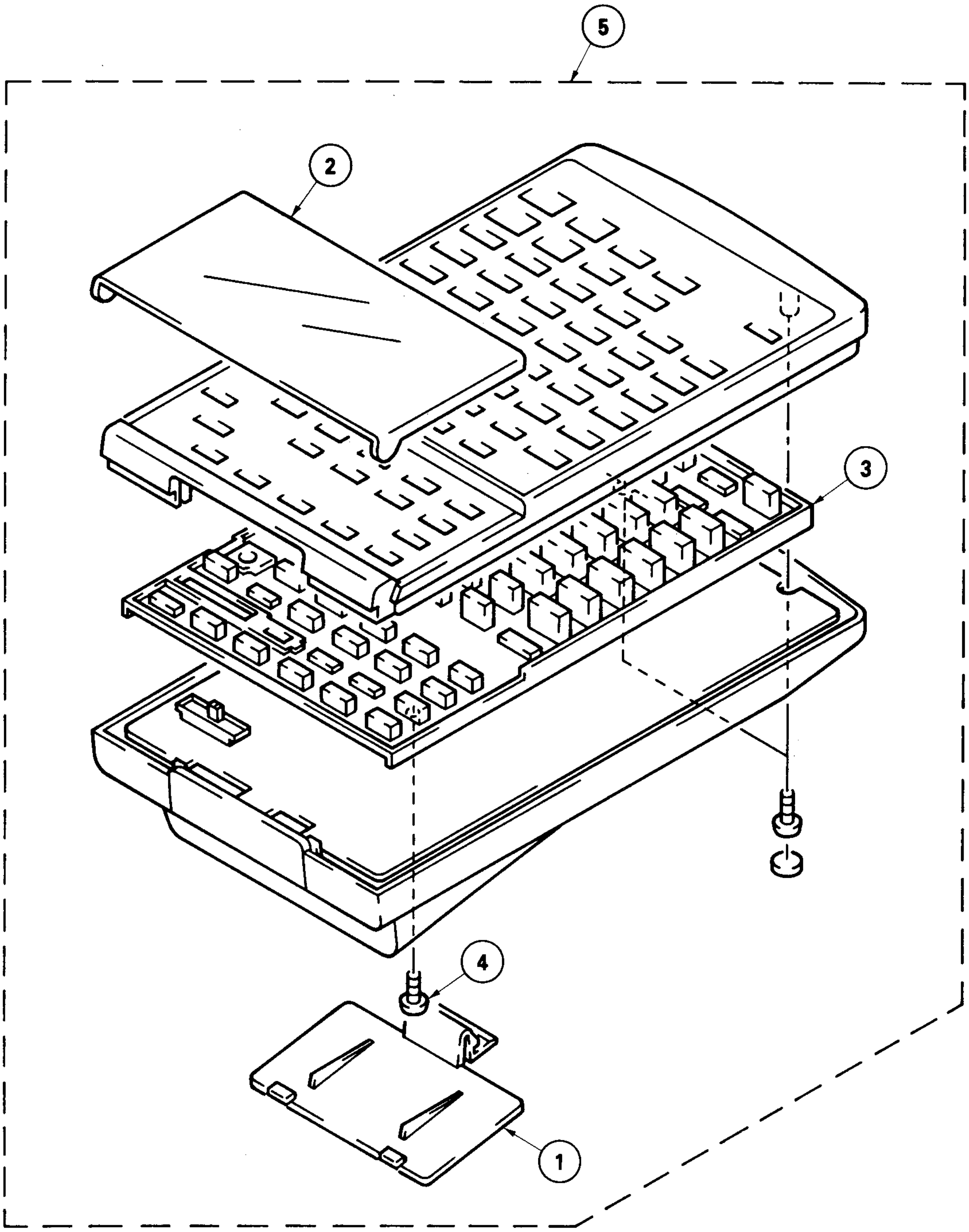
Design and specifications subject to change without notice.

REMOTE COMMANDER

SONY®

EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	9-997-963-01	COVER, BATTERY	
2	9-997-964-01	COVER	
3	9-997-965-01	SWITCH RUBBER	
4	9-997-966-01	SCREW-TAPPING M2X8	
5	1-465-618-11	COMMANDER, REMOTE (RM-811)	1-4

Sony Corporation
TV Group

English
90JJ0228-1
Printed in Japan
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